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HARVEY

RADIO COMPANY, INC.

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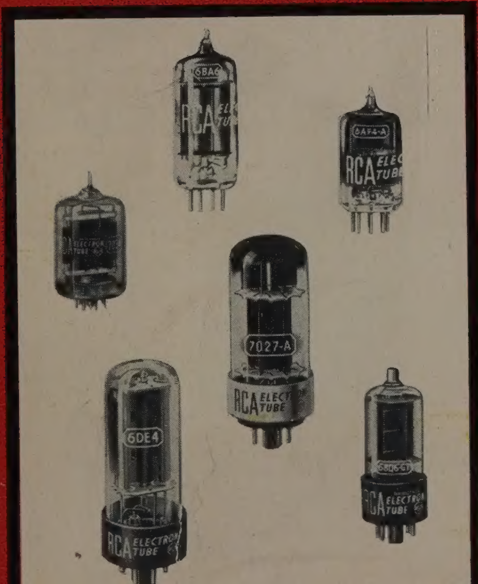
6BA6
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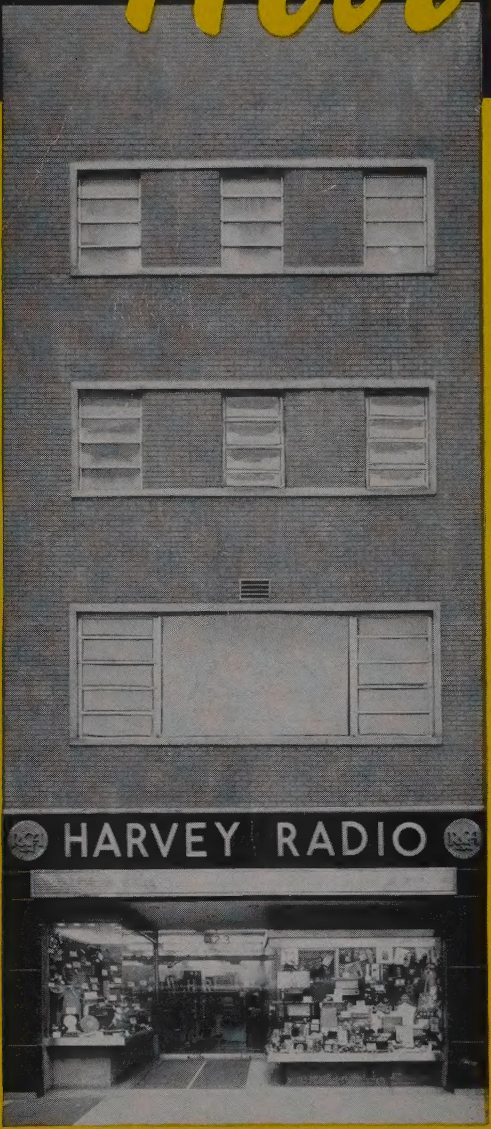
RCA ELECTRON TUBE

RADIO PARTS • HI-FI AUDIO SYSTEMS • TEST EQUIPMENT TUBES • BATTERIES • TAPE RECORDERS • BROADCAST SUPPLIES

OUR 32nd YEAR

Price
50c

Harvey



FRONT OF HARVEY'S BUILDING LOCATED AT 1123 AVENUE OF THE AMERICA'S (6TH AVENUE) AND CONNECTED WITH THE 103-105 W. 43RD ST. HEADQUARTERS.

Here in these spacious quarters is located the Harvey AUDIOtorium . . . featuring the very latest releases in Stereo Equipment

On constant display at Harvey . . . the newest equipment from the outstanding producers in the electronic industry. A complete selection of speakers, amplifiers, tuners, tape recorders, disc recorders, record players and the many other electronic devices necessary for the fine reproduction of recorded sound. *All the latest Stereo Equipment on display and ready for immediate delivery.*

PROFESSIONAL AUDIO DEPARTMENT

Harvey's newly opened PROFESSIONAL AUDIO ROOM, designed for the Audio Engineer, contains all the necessary recording equipment and assorted amplifiers that one could find or need for any type of recording. Here you not only see all the *current* equipment on display, but have the opportunity of putting it through its paces! Be sure to visit our PROFESSIONAL AUDIO ROOM.

STEREO, HI-FI DEPARTMENT

Harvey's AUDIOtorium, the nation's outstanding sound demonstration room, has been the mecca of music lovers and audiophiles from the infancy of the industry. 10,000 square feet devoted to demonstration of the latest and newest releases in stereo, hi-fi equipment.

INDUSTRIAL DEPARTMENT

We have the equipment on hand to fit your industrial requirements, and our staff of experienced men, familiar with the needs of the industrial customer, possess the know-how to give you the proper assistance. Telephone, telegraph, or write our industrial division.

AMATEUR DEPARTMENT

Don't miss looking over our fine display of amateur equipment. Our personnel in this department understand the problems of the "Ham", and are ready to be of service on all your requirements.

Another Catalog Produced by
ELECTRONIC PUBLISHING CO., INC., Chicago 6, Illinois

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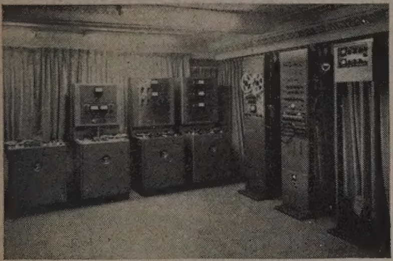
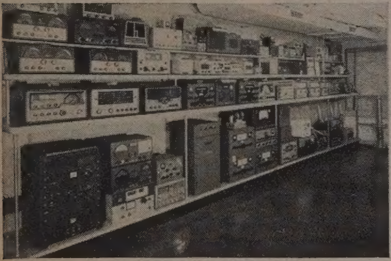
FOR EVERYTHING IN ELECTRONICS


HARVEY'S LATEST ADDITION, THE PROFESSIONAL AUDIO ROOM

INDUSTRIAL DIVISION


AMATEUR DIVISION

COMPONENT PARTS SALES

This catalog is large in size, but it is still impossible to list every item we carry. Only the most popular items in our ever expanding inventory are shown herein. Therefore, if you need an item not listed, order it . . . *we can supply it.*

PROMPT, DEPENDABLE DELIVERY

We continually maintain large inventories, enabling us to serve you promptly. If you need an item urgently, advise by wire or phone and we will ship immediately. If it is not possible to do so, we will notify you at once and advise delivery date.

A WORD ABOUT PRICES

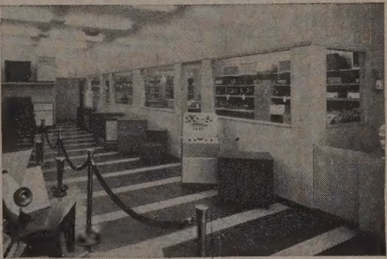
The prices in this catalog were correct at press time, but they are subject to change without notice. Orders will be filled at the price prevailing on date of shipment, regardless whether that be higher or lower than the price shown herein.

GUARANTEE

Every item sold by the Harvey Radio Company is fully guaranteed by the standard warranty of the Electronic Industries Association. Defective items will be replaced or repaired if returned within the warranty period. However, please obtain written permission before returning any item.

TERMS AND DISCOUNTS

A deposit of 25% should accompany all C.O.D. orders. Orders amounting to $5.00 or less should be prepaid in full. OPEN ACCOUNT granted to rated firms. Terms are 2% ten days, net 30 days.


PRIVATE HIGH FIDELITY SOUND DEMONSTRATION ROOMS IN HARVEY AUDIOtorium

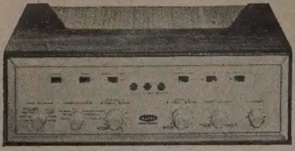
VIEW OF HARVEY AUDIOtorium, 1123 AVENUE OF THE AMERICA'S, ADJOINING 43RD ST. STORE

MAIL ORDER BUYERS

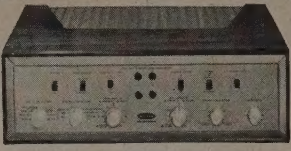
For more than 30 years, the Harvey guarantee has been respected as the finest in the Electronic Industry. Our unmatched reputation is your assurance of highest quality, honest values and lasting dependability. Our huge, complete stocks insure immediate shipment whether your needs be a single tube, a complete ham rig, or an entire music system.

Scott Stereo, Hi-Fi Equipment

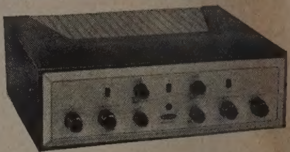
STEREO AMPLIFIERS, PREAMPS, TUNERS, ARM AND CARTRIDGE



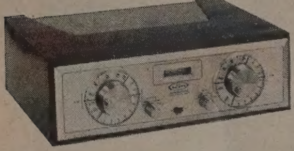
MODEL 299



MODEL 130

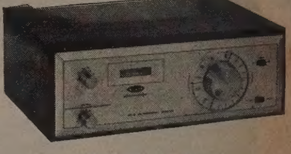


MODEL 222



MODEL 330-D

MODEL 320



MODEL 310-C

MODEL 299 STEREO AMPLIFIER

Complete unit with dual preamplifiers and dual 20-watt power sections for the most advanced two-channel stereo. **Features:** Separate bass and treble controls for each channel; 3 mv stereo cartridge input for even the lowest output cartridges; master balance control handles both channels quickly; master volume control with loudness/volume switch for easy tonal balance; phase reversal switch cleans up poorly made tapes and recordings; may be used as an electronic crossover. **Power Output:** 20 watts per section; 40 watts peak. **Frequency Response:** Flat, 20-30,000 cps. **Distortion:** Less than 0.3%, first order IM; less than 0.8% harmonic. **Hum Level:** 80 db below max. output. **Inputs:** 2 low level magnetic (1 for tape deck), 2 high level (tuner and tape). **Outputs:** Tape recorder; 4, 8 and 16-ohm speaker taps for each channel; 1 switched AC outlet. **Controls:** Function (Balance A, Balance B, Stereo, Stereo Reverse, Monophonic Records, Channel A, Channel B); Bass (1 for each channel); Treble (1 for each channel); Balance; Loudness; Loudness-Volume Switch; Scratch Filter On-Off; Rumble Filter On-Off; Channel A and Channel B Magnetic Inputs 1 and 2; Input Selector (EUR 78, RIAA, NAB Tape, Tuner, Tape); Phase Reversal; Power Off. **Tubes:** 4-12AX7, 4-7189, 1-5U4GB. **Operation:** 105-125 v., 50-60 cps, fused; 17 watts per section. **Size:** 15½" w. x 12½" d. x 5" h. Shipping Weight, 25 lbs.

H. H. Scott Model 299 Stereo Amplifier—Net Each. $\$199^{95}$

MODEL 130 STEREO PREAMPLIFIER

Remarkable instrument plays stereo records and tape, stereo AM-FM or other sources, plus all monophonic sound sources. Special circuit permits use of stereo cartridge for monophonic playback. **Features:** Separate bass and treble controls for each channel. Center channel output provided for a third amplifier and speaker for top realism; may be used as an electronic crossover in monophonic system. Four indicator lights give visual indication of function in operation. **Frequency Response:** Flat 19-35,000 cps. **Distortion:** Less than .15% rated output. **Hum and Noise:** 3 µv on magnetic low-level inputs; 80 db below full output on high level. **Input Sensitivity:** 3 mv for 2.5 v. output on magnetic; 1.5 mv for 2.5 v. output on NAB; .1 v. for 2.5 volts output on tuner and auxiliary. **Inputs:** Two magnetic stereo, two high level stereo. **Outputs:** Channel A, Channel B, and center channel; three aux AC outlets, switched. **Controls:** Function (Balance A, Balance B, Monophonic, Stereo, Reverse Stereo, Channel A, Channel B); Bass and Treble with crossover position; Channel A and B Bass and Treble; Stereo Balance; Loudness Control; Loudness/Volume Switch; Input Selector (EUR-78, Orig. LON, Orig. AES, RIAA, Orig. COL, NAB, Tuner and Extra); Scratch Filter; Rumble Filter; Tape Monitor; Phase Control; Pickup Selector. **Size:** 15½" w. x 12½" d. x 5" h. Wt., 15 lbs. $\$169^{95}$

H. H. Scott Model 130 Stereo Preamp—Net Each..

MODEL 222 STEREO AMPLIFIER

Complete 24-watt, two-channel stereophonic amplifier; 12-watts per channel. **Features:** Separate controls for each channel; DC heaters for minimum hum level; special calibration of tone controls for operation as electronic crossover, or "Bi-Amplifier". **Power Output:** 12 watts per channel; 24 watts total. **Frequency Response:** Flat, 20-30,000 cps. **Distortion:** Less than 0.3%, first order IM; 0.8% harmonic at full output. **Hum and Noise:** 80 db below full output. **Sensitivity:** Low 3 mv magnetic; high 9 mv magnetic, tuner, tape recorder. **Outputs:** Stereo tape recorder; 4, 8, 16-ohm each channel; center channel; switched AC outlet. **Controls:** Equalization Selector; Input Selector; Stereo Selector; Channel A Bass; Channel A Treble; Channel B Bass; Channel B Treble; Scratch Filter; Volume-Loudness; Stereo-Balance; Master Volume. **Tubes:** 11. **Operation:** 105-125 v. AC, 50-60 cps. **Size:** 15½" w. x 12½" d. x 5" h. Shipping Weight, 22 lbs. $\$139^{95}$

H. H. Scott Model 222 Stereo Amplifier—Net Each.

MODEL 330-D STEREO AM-FM TUNER

FM SECTION: New improved silver-plated front end. **Sensitivity:** 2 µv on 300 ohm antenna terminals for 20 db quieting; 1 µv for 20 db quieting with matched 72-ohm antenna. **Tuning:** Controls permit vernier and fast tuning; illuminated VU meter for FM-AM precision tuning. **Antenna Input:** 300 ohms, with negligible mismatch on 72 ohms. Wide band design—150 kc IF passband; 2 mc detector; 80 db rejection of cross modulation; AGC; 2 stages of full limiting; equipped for multiplex operation.
AM SECTION: **Sensitivity:** 1 µv. **Audio Output:** 4 volts for 100% modulation. Three-position adjustable IF bandwidth (wide range, normal, distance); 10 kc whistle filter; external antenna connections for weak signal areas. **Controls:** FM Tuning; AM Tuning. Mode Selector (Off, Monophonic, Stereophonic, Stereophonic Phase Reverse); Band Selector (FM, AM wide, AM normal, AM distant); AM-FM Meter; separate AM and FM level controls at rear. Separate output jacks for stereophonic operation, tape recording, and multiplex. Built-in Ferri-loopstick for improved AM reception. Copper-clad aluminum chassis. **Tubes:** 12 and 2 diodes. **Operation:** 105-125 v. AC, 50-60 cps, 60 watts. **Size:** 15½" w. x 12½" d. x 5" h. Weight, 15 lbs.

H. H. Scott Model 330-D AM-FM Tuner—Net Each. $\$224^{95}$

MODEL 320 AM-FM TUNER

Features slide-rule tuning with logging scale; tuning indicator for pinpoint tuning and relative signal strength. FM SECTION: New improved silver-plated front end. **Sensitivity:** 3 µv on 300 ohm input for 20 db quieting; 1.5 µv on matched 72 ohm antenna; 150 kc IF passband for weak station reception; 2 mc bandwidth detector; drift-free oscillator; automatic gain control; low capture ratio for reflecting interference. **Tuning:** 87-109 mc tuning range; 2 stages of full limiting; equipped for multiplex operation. AM SECTION: Separate tuned RF for max. selectivity and sensitivity; 10 kc whistle filter; AM adjustable for high fidelity or normal AM broadcasts; Ferri-loopstick built-in. **Controls:** Tuning; Selector (Off, AM, FM, AM wide range); Tuning indicator, Level Control; Monophonic-Multiplex Stereo Switch. **Outputs:** Eight possible combinations of Main, Tape Recorder, Multiplex. **Tubes:** 9 and 2 diodes. **Operation:** 105-125 v. AC, 50-60 cps. **Size:** 15½" w. x 12½" d. x 5" h. Weight. 12 lbs.

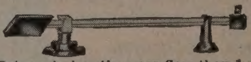
H. H. Scott Model 320 AM-FM Tuner—Net Each.. $\$139^{95}$

MODEL 310-C FM BROADCAST MONITOR TUNER

Sensitivity: 1.5 µv on 300 ohm output for 20 db of quieting; 3 µv for 40 db quieting. **Dynaural Interstation Noise Suppressor. Tuning Range:** 87-109 mc. **Audio Output:** 4 v. for 75 kc deviation. 150 kc IF passband; 2 mc limiters and detector; three stages of full limiting; 85 db rejection of cross-modulation; 2½ db capture ratio; AGC; planetary drive tuning; vernier control; tuning meter; two feedback stages of low distortion audio amplification. **Antenna Input:** 300 ohms. Low impedance output permits use of 70 ft. cable. Self-contained power supply, 105-125 v., 50-60 cps AC, 50 watts. **Outputs:** Channel A high and low (tape); Channel B high and low (tape); Multiplex output; Switched AC outlet. **Controls:** Power (Off/On); FM Tuning; Level; Interstation Noise Suppressor; Local-distant switch for optimum sensitivity in fringe areas. **Tubes:** 10 and 3 diodes. **Size:** 13½" w. x 9¾" d. x 5" h. Net Weight, 16 lbs.

H. H. Scott Model 310-C FM Tuner—Net Each.... $\$174^{95}$

MODEL 1000 STEREO ARM AND CARTRIDGE

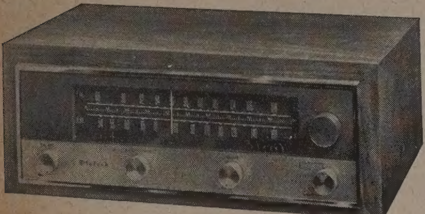


Combination magnetic pickup and arm designed by London Recording Labs and H. H. Scott to meet all stereo record requirements. Extremely low tip mass (less than 1 milligram) and high vertical compliance (3.5×10^{-6} cm/dyne) assure wide frequency response; record wear reduced to absolute minimum. Fully shielded construction. **Frequency Response:** 20-18,000 cps, ±2 db. **Output:** 7 mv; no transformer needed. **Impedance:** 4,000 ohms per channel at 400 cps; recommended load, 47,000 ohms. **Cross-Talk:** Better than −20 db. **Tracking:** 3.5 grams; arm mounted on special frictionless roller bearings to minimize lateral tracking pressure. **Size:** 12½" long; height adjustable from 1⅜" to 2½" above mounting board. Shipping Weight, 1½ lbs.

H. H. Scott Model 1000 Stereo Arm and Cartridge—Complete with .5 mil diamond stylus, arm rest, connecting cables, mounting hardware and templates. Net Each........ $\$89^{95}$

McIntosh Stereo, Hi-Fi Equipment

MODEL MR-55A AM-FM TUNER



The only FM-AM tuner offering distortion-free AFC and ultrasonic muting. FM FEATURES: **Sensitivity:** 3 μv at 100% modulation; less than 3% total noise and distortion. **Hum:** 75 db below full signal. **Drift:** ±30 kc without AFC; negligible with AFC. **AFC:** Separate detector; strong, distortion-free, completely variable. **Frequency Response:** ±3 db, 20-20,000 cps. Capture ratio, 1:0.8. Four IF amplifiers; mechanically captive IF transformers; 200 kc (flat on top) IF bandwidth. Two limiters, 2 mc bandwidth. Two antenna input impedances, 300 ohm balanced and 72 ohm unbalanced. Radiation below FCC requirements. AM FEATURES: **Sensitivity:** 1.5 μv. **Selectivity:** Narrow position, 4 kc bandwidth, ±10 kc from center down 53 db; medium position, 13 kc bandwidth, ±10 kc from center down 20 db; broad position, 20 kc bandwidth. **Distortion:** Less than 1% at 100% modulation. **Hum:** 50 db below full signal. **AVC:** Less than 4 db audio output change with 10-100,000 μv input changes. **Whistle Filter:** 70 db rejection, 10 kc on narrow and medium positions; none on broad. CONTROLS: Off/FM/AFC; AM Sensitivity (3 positions); Volume/Off; Selector (Phono, AM Broad, AM Narrow, AM Medium, FM Listen, FM Tune); slide-rule, two-scale dial. **Size:** 14¾″ w. x 12″ d. x 4¾″ h. Shipping Weight, 17½ lbs.

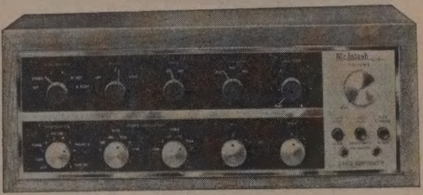
McIntosh Model MR-55A—Chassis only. Net Each. **\$249^{00}**

McIntosh Model L-55M (Mahogany); L-55B (Blond), or L-55W (Walnut) Cabinet—Net Each........................**$25.00**

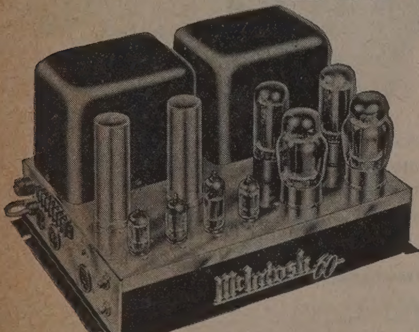
MODEL C-20 STEREO COMPENSATOR

Designed and engineered specifically for stereo reproduction, this fine dual preamplifier is the result of intensive study and thorough construction designing. The careful attention to details by the acknowledged leader in high fidelity components has produced this model to provide you with the greatest flexibility for all your preamplification requirements. **Inputs:** Eight inputs, including special input switching to parallel the sides of a stereo cartridge (cancels the vertical signal for highest quality monophonic reproduction from a stereo cartridge). Gain sufficient for full output from even the lowest output cartridges. **Equalization:** Separate for bass and treble for highest flexibility; NAB built-in for direct tape head playback. **Bass and Treble:** Individual bass and treble ganged to both channels on front panel; separate, independent balance controls on rear panel sets each channel to suit your ear. **Other Controls:** Master Volume Control; Mode Selector (Stereo, Reverse, Left, Right; Monophonic Left, Right); Balance (Left, Right) Phase (essential for stereo, relates one speaker to the other without changing loudness or frequency response); three-position High Frequency Cut-off; Continuously Variable Loudness (boosts bass at low volume levels in Fletcher-Munson curve); Pushbutton Rumble Filter; Pushbutton Tape Selector (In-Play; Out-Record); Pushbutton Tape Comparison (Monitor). **Outputs:** Two front panel for tape recorder.

McIntosh Model C-20—Less cabinet. Net Each..... **\$225^{00}**



MODEL MC-60 HI-FI 60-WATT AMPLIFIER



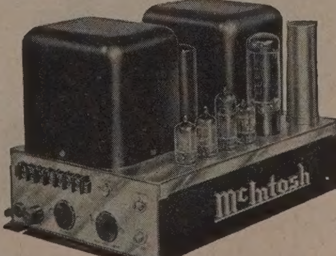
For the audiophile who wants nothing but the best. Patented circuit with unity coupling provides 99.60% perfect amplification; 60 watts output at less than 0.3% harmonic or IM distortion, 20-20,000 cps. Makes bass response full and natural without boom; clear, lucid highs without peaking and unbelievable middle tones of rare richness. **Frequency Response:** ±0.1 db, 20-30,000 cps at 60 watts output; ±0.5 db, 15-50,000 cps at 60 watts output; ±1.0 db, 10-100,000 cps at 30 watts output. **Noise and Hum Level:** 90 db or more below rated output. **Harmonic Distortion:** Guaranteed less than 0.3% at 60 watts output or less, 20-20,000 cps. **Intermodulation Distortion:** Less than 0.5% if instantaneous peak power is below 120 watts. **Impulse Distortion:** Negligible. **Damping Factor:** 15 or better for 4, 8 and 16 ohms output, 16 for 600 ohms. **Phase Shift:** ±8°, 20-20,000 cps. **Input Impedance:** 0.5 meg for 0.5 volt input and 0.13 meg for 2.5 volt input, 20-40,000 cps. **Output Impedance:** 4, 8, 16 and 600 ohms (600 ohm is balanced to ground); 70.7 v. **Input Levels:** Input #1, 0.5 volt to 30 volts, with gain control; Input #2, 2.5 volts. Designed to power Models C-4, C-8, etc. **Tubes:** 2-12AX7, 1-12BH7, 1-12AU7, 2-6550 and 2-5U4GA. **Power Supply:** 117-125 volts, 50-60 cps. **Power Output:** 60 watts continuous. **Power Consumption:** 280 watts at 60 watts output; 155 watts at zero signal output. **Dimensions:** 14¼″ w. x 10″ d. x 8″ h. Weight, 43 lbs., approximately.

McIntosh Model MC-60—Net Each............... **\$198^{50}**

MODEL MC-30 HI-FI 30-WATT AMPLIFIER

McIntosh circuit and unity coupling for high efficiency class B amplification and high quality performance. Wave form distortion is eliminated at all frequencies. The ½ cathode, ½ plate loading provides a feedback factor of 12 db which, with additional loop feedback, offers the lowest distortion and the most stable power. Impulse distortion is negligible. **Frequency Response:** ±0.1 db, 20-30,000 cps at 30 watts output; ±0.5 db, 15-50,000 cps at 30 watts output; ±1 db, 10-100,000 cps, at 15 watts output. **Distortion:** HARMONIC—Less than 0.3% at 30 watts output or less, 20-20,000 cps. INTERMODULATION—Less than ½%, instantaneous peak below 60 watts, 20-20,000 cps. **Noise and Hum:** 90 db or more below rated output. **Damping Factor:** 12 or better for 4, 8, 16 ohms, 16 for 600 ohms. **Impedances:** INPUT (20-40,000 cps)—0.5 meg for 0.5 v. input; 0.13 meg for 2.5 v. input. OUTPUT—4, 8, 16, and 600 (balanced to ground) ohms; 70.7 v. **Phase Shift:** 20 cps, 3°; 20 kc, 9°. **Power:** Output, 30 watts continuous; Consumption, 155 watts at 30 watts output; 105 watts at 0 signal output. SUPPLY—117-125 v., 50/60 cps. **Tubes:** 1-5U4GA, 1-12AU7, 2-12AX7, 1-12BH7, 2-1614. **Size:** 13⅛″ w. x 8″ d. x 8″ h. Weight, 30½ lbs.

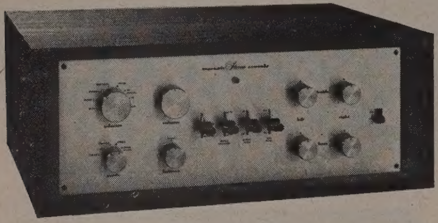
McIntosh Model MC-30—Net Each............... **\$143^{30}**



marantz Stereo Components

NEW MODEL 7 STEREO CONSOLE PREAMPLIFIER

- SELF-POWERED, LOW LEVEL CIRCUITRY
- 18 INPUTS
- 6 OUTPUTS
- GANGED VOLUME CONTROL
- SEPARATE BASS AND TREBLE
- COMPLETE TAPE MONITORING FACILITIES
- FINE WOOD CABINETRY AVAILABLE



Superb self-powered, stereo preamplifier features high versatility with remarkable ease of operation. Assures unexcelled performance in programing any source of stereo or monophonic sound. Features a newly developed low level circuit that reduces noise and distortion to insignificance. Handy toggle selection of equalization and filtering makes adjustments easy. Single knob function and mode selectors meet the most demanding requirements. Separate bass and treble controls assure perfect quality of tone for each channel. Six convenience AC outlets (five of which are switched), provide power for your complete system. **Frequency Response:** ±0.5 db, 20-20,000 cps. **Distortion:** 0.1%, 10 volts equivalent peak rms; 0.01%, 2 volts equivalent peak rms. **Noise:** −80 db at 10 mv phono input with RIAA, 20-20,000 cps, total; hum is far below thermal noise. **Controls:** Function Selector (Mike, Phono 1, Phono 2, Tape Head, AM-FM Tuner, FM Multiplex, TV and Aux.); Mode (Stereo, Reverse, Channel A, Channel B, Channel A + B Monophonic); Volume (ganged to both channels and tested for 2 d tracking at any point of rotation down to 65 db attenuation); Bass (each channel); Treble (each channel); Tape Playback or Monito Switch; High Filter; Rumble Filter; Power Switch; Equalizatio (RIAA, old COL LP and early 78). Bass and treble controls ar step type feedback units in increments of 3 db at 50 cps; 2½ db a 10 kc. **Inputs:** Nine each channel for total of 18. **Outputs:** On recording and two amplifier outputs for each channel. **Gain:** 64½ db, phono and tape head; 62 db, mike; 22½ db, high level. A recording output, 42 db, phono and tape head; 40 db, mike; unit (0 db), high level. **Tubes:** 6-ECC83/12AX7. **Size:** 15⅜" w. 8½" d. x 5¾" h., overall. Shipping Weight, 20 lbs.

Marantz Model 7 Stereo Console—Chassis only. Net Each.................................... \$249^{00}

Marantz Cabinet for Model 7—Specify walnut, mahogany or blond. Net Each.......................... \$24^{00}

NEW MODEL 8 DUAL-CHANNEL, STEREO POWER AMPLIFIER

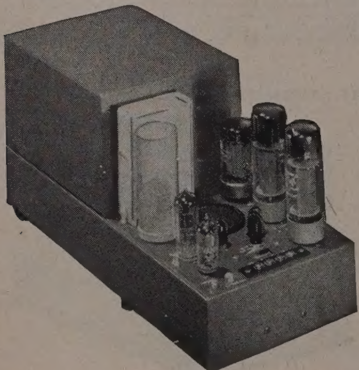
- LABORATORY QUALITY FOR TOP PERFORMANCE
- HAS TWO 30-WATT CHANNELS

Engineered for high listening pleasure and long, trouble-free performance, this basic stereo amplifier brings you the high quality normally found in only broadcast or laboratory equipment. Features built-in, metered test instruments to permit simple, accurate adjustments for optimum performance. Essentially two Model 5 amplifiers on a single, compact chassis, this unit is ideal for multiple amplification systems such as stereo high fidelity and monophonic multi-speakers systems using the Marantz Electronic Crossover. **Power Output:** 30 watts, 60 watts peak, per channel, ultra-linear operation: 18 watts per channel, triode operation by simple inside-chassis alteration. **Output Impedances:** 4, 8, 16 ohms, each channel. **Input Sensitivity:** 1.3 v. rms into 250K ohms for 30 watts output. **Response:** Within 0.2 db, 20-20,000 cps at 30 watts; within 1 db, 15-40,000 cps into grid (or test) input. **Distortion:** Less than 0.1% harmonic at mid-frequencies; 0.5%, 20-10,000 cps; 1.0% at 20 kc with resistive load; under 0.5% IM (60 cps/12 kc, 4:1) at 30 watts equivalent (60 watts peak). **Inverse Feedback and Stability:** 20 db of overall feedback. **Hum:** Better than 90 db below 30 watts. **Power Supply:** Utilizes silicon rectifiers, three telephone electrolytic capacitors and a choke to provide improved regulation and thorough filtering with long life and high reliability. **Damping Factor:** Greater than 20, 20-20,000 cps. **Power Required:** 170 watts at zero signal (250 watts at maximum signal), 105-125 v. AC, 60 cps. **Tubes:** 2-6BH6, 2-6CG7, 4-EL34/6CA7. **Size:** 13½" w. x 10½" d. x 7¼" h. Shipping Weight, 52 lbs.

Marantz Model 8 Stereo Power Amplifier—Net Ea.. \$237^{00}

MODEL 5 30-WATT POWER AMPLIFIER

- BUILT-IN METERED TEST INSTRUMENTS PERMIT SIMPLE, ACCURATE ADJUSTMENTS
- USE TWO FOR IDEAL STEREO



- DELIVERS 30 WATTS ULTRA-LINEAR OR 18 WATTS TRIODE OPERATION
- FILTERED POWER SUPPLY FOR LONG LIFE
- LOW DISTORTION CIRCUITRY
- LESS THAN 1% HARMONIC DISTORTION

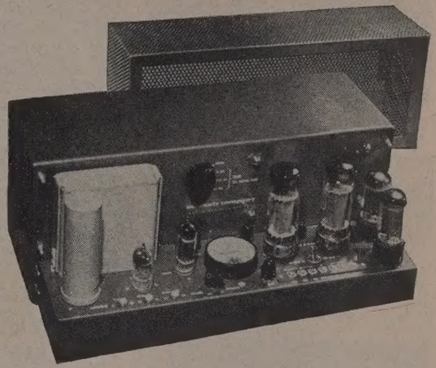
Features same circuit and construction as the famous Model Amplifier. Offers built-in metered tests and adjustments f continuing optimum performance. Can be converted into triod amplifier by two connection changes. Provision for addition desired damping factors. Appropriately shaped so that it may group mounted in multiple installations for stereophonic system **Power Output:** 30 watts, 60 watts peak, ultra-linear operatio **Output Impedances:** 4, 8, and 16 ohms. **Input Sensitivity:** 1.3 for 30 watts output. **Response:** At 30 watts, within 0.2 db fro 20-20,000 cps, within 1 db from 15-40,000 cps; at ½ watt, ±1 d from 3-40,000 cps. **Distortion:** HARMONIC, less than 0.1% mid-frequencies at 30 watts; less than 0.5% from 20-10,000 cps 30 watts; less than 1% at 20 kc with resistive load at 30 wat (far less at the equivalent voltages with inductive speaker loads INTERMODULATION, at 30 watts equivalent (60 watts peak less than 0.5% (60 cps/12 kc, 4:1). **Inverse Feedback and Stabilit** 20 db of overall feedback. **Hum:** Better than 90 db below 30 watt containing proportionately little of high order components. **Pow Supply:** Transmitting type oil input capacitor, choke, telepho quality electrolytic and heater-cathode rectifier provides protetion from starting surge voltages, improved regulation and thoough filtering. **Power Requirements:** Design center, 117 volt 60 cps; Range, 105-125 volts, 50-60 cps; 100 watts at zero signa 130 watts at maximum signal. **Tubes:** 1-6BH6, 1-6CG7, 2-EL3 6CA7, 1-GZ34. **Size:** 6" w. x 15¼" d. x 7⅜" h. Shipping Wt., 34 lb

Marantz Model 5 30-Watt Power Amplifier—Chassis only. Net Each.................................. \$147^{0}

Gold finished perforated cover grille. Net Each..........**\$7.5**

marantz Hi-Fi Components

MODEL 2 PROFESSIONAL 40-WATT POWER AMPLIFIER

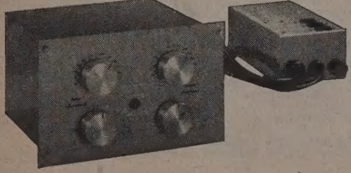


Power Output: 40 watts, 80 watts peak, ultra-linear operation. 20 watt triode operation. Switch changes output connections to protect speakers of low power rating. **Output Impedances:** 4, 8, 16 ohms from ground return; 4, 8 and 16 ohms variable damping return. **Input Sensitivity** (for 40 watts): Two high gain inputs. 0.7 volt rms into 105K; one preamp input, 2.0 volts rms into 285K. **Response: At 40 watts,** ±0.1 db, 20-20,000 cps; ±1 db, 15-45,000 cps. **At ½ watt,** ±1 db, 2-50,000 cps. Response has been deliberately rolled off approx. 5 db at 100 kc to control transient response. In "Preamp" and "High Gain Filtered" inputs, response is slowly rolled off below 20 cps. **Distortion:** HARMONIC, less than 0.1% at mid-frequencies; less than 0.5%, 20-10,000 cps; less than 1.5% at 20 kc with resistive load—far less at equivalent voltages with inductive speaker loads. INTERMODULATION, less than 0.5% at 40 watts equivalent (80 watts peak). Distortion below 30 watts largely 2nd order; reduces rapidly with signal level. **Damping Factors:** Greater than 20 from 20-20,000 cps; continuously variable from 5 to ½ with variable damping connections. **Inverse Feedback and Stability:** 23½ db of overall feedback; 20 db in triode position. Stable with low distortion under widely varying loads, both resistive and reactive. Power supply surges balanced out of signal channels. Will not oscillate with open circuit capacitive loads. **Hum:** Better than 90 db below 40 watts. **Metered Tests and Adjustments:** Bias, DC balance, AC balance (drive); all accurately adjustable with built-in meter and test switch, making matched tubes unnecessary. **Power Supply:** Transmitting type oil input capacitor, choke, telephone quality electrolytic and 6AU4-GTA, as heater cathode rectifiers, provide protection from starting surge voltages, improved regulation and thorough filtering. **Power Requirements:** Design center, 117 volts, 60 cps; Range, 105-125 volts, 50-60 cps. 150 watts at zero signal; 200 watts at maximum signal. **Tubes:** 1-ECC83, 1-6CG7, 2-EL34/6CA7, 2-6AU4-GTA. **Size:** 15" w. x 9½" d. x 6½" h. Shipping Wt., 47 lbs.

Marantz Model 2 Professional 40-Watt Power Amplifier—Net Each............................ **$219.00**

MODEL 3 ELECTRONIC CROSSOVER

- **IMPROVES SPEAKER CLARITY BY MAKING DIVISION BETWEEN PREAMP AND AMPLIFIER**
- **HOLDS NOISE AND DISTORTION TO MINIMUM**
- **COMPLETE WITH REMOTE POWER SUPPLY**
- **VARIABLE FREQUENCY ADJUSTMENTS PROVIDED**



Self-powered, two-way electronic crossover for use in biamplifier systems. Provides greater clarity in multi-speaker systems by making the frequency division prior to signal entry into the power amplifier. Splits the preamplifier signal into two channels feeding separate power amplifiers and speakers. For more than two channels, two or more of these crossover units provide multiple frequency division. Remote power supply; DC heater on all three dual triode tubes; outputs are cathode follower. Each channel has its own controls for crossover frequency and volume level; crossover control switches provide 12 settings at ½-octave intervals from 100 to 7,000 cps. Removable plastic cover is supplied to protect the tweeter from damage due to tampering with the high channel control. **Crossovers:** 100, 150, 220, 350, 500, 700, 1,000, 1,500, 2,200, 3,500, 5,000, or 7,000 cps, switch-selected individually for both channels. **Slope:** 12 db per octave. **Gain:** Zero db with channel level controls at normal position; 10 db with controls at maximum position. **Hum and Noise:** Over 90 db below 2 v. output. **IM Distortion:** Below 0.1% at 2 v. output; less than 1.0% at 15 v. output. DC heater supply. **Input:** One, from preamplifier-control unit. **Controls:** Bass Channel Crossover; Bass Channel Level; Treble Channel Crossover; Treble Channel Level. **Outputs:** Two, to bass channel and treble channel amplifiers, from cathode followers. Three AC outlet receptacles. **Tubes:** 3-12AX7, selenium rectifiers for heaters and B+. **Dimensions:** Crossover unit, 7¼" w. x 7¾" d. x 4⅝" h.; Power supply, 3½" w. x 6" d. x 2⅝" h.

Marantz Model 3 Electronic Crossover—With power supply. Net Each................................ **$90.00**

Marantz Cabinet for Model 3—Specify mahogany, walnut or blond. Net Each.................................... **$15.00**

Marantz Dual Cabinet for Model 3—Holds two crossovers; can be used with a single unit with matching blank panel available for unused section. Specify finish as above. Net Each. . **$19.50**

Marantz Blank Panel for Dual Cabinet—Net Each.... **3.00**

MODEL 1 AUDIO CONSOLETTE

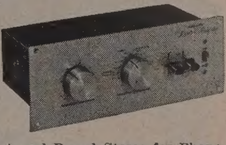
MONOPHONIC PREAMP-EQUALIZER

Hum: Inaudible at full gain. **Wideband Noise:** With 2000 ohms across low-level phono input, all controls flat; better than 70 db below 10 mv input. **Intermodulation Distortion:** With volume at max. and other controls at flat, 60 cps and 7 kc mixed 4:1 ratio; 15 v. equiv. peak rms, less than 1%; 2 v. equiv. peak rms, less than 0.1%. **Frequency Response:** 20-60,000 cps, ±1 db. **Controls:** 6-position Selector Switch for 3 low level input channels and 3 high level input channels; Tape Playback, or Monitor Switch; Bass Record Equalizer, six turn-over positions; Treble Record Equalizer, seven rolloff positions; NAB Tapehead Equalization. Continuously Variable Loudness Compensator of Fletcher-Munson type, independent of volume control; Bass Tone Control, 300 cps turn-over point; Treble Tone Control, 2500 cps turn-over point. High frequency cutoff filter, 12 db per octave cutoff from 3 selected frequencies. On-Off Switch. **Outputs:** Cathode follower main output permits long shielded leads to power amplifier. Selector switch controlled recording output can be used to feed a tape recorder—unaffected by all controls except record equalizers. **Power Supply:** A remote, miniature power supply plugs into the main unit to provide DC for filaments and B plus. Three convenient outlets controlled by the On-Off switch are provided for the other components. Requires 105-125 volts, 50-60 cycles. **Tubes:** 3-ECC83 tubes. **Size:** Panel, 14½" x 4⅝". Chassis, 13½" x 6" x 4". Shipping Weight, with cabinet, 16 lbs.; less cabinet, 14 lbs.

Marantz Model 1 Audio Consolette—Less Cabinet. . **$153.00**

Marantz Model 1 Audio Consolette—With cabinet. Specify mahogany, walnut or blond finish. Net Each........... **$171.00**

MODEL 6 STEREO ADAPTER



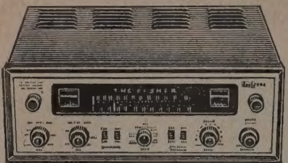
Connects two Audio Consolettes for both stereo and monophonic operation. Provides 12 inputs, two recording outputs and two output cables to preamps. Contains inputs for tape playback as well as monophonic and stereo recorders. May be used with other preamps that are equipped with tape monitor and recording outputs. **Controls:** Master Selector (provides Monophonic A and B and Stereo for Phono, Tuner, Tape and TV, plus Extra); Master Volume (step-attenuator type); Stereo-Monophonic Monitor Switch; Speaker Reversal Switch; Master Power On/Off. Mounts horizontally or vertically. **Size:** 9¼" x 3⅝" x 4½".

Marantz Model 6H Stereo Adapter—Horizontal mtg. Net Each.. **$45.00**

Marantz Model 6V Stereo Adapter—Vertical mtg. Net. **$45.00**

MARANTZ HIGH FIDELITY LEADS THE FIELD. WE INVITE YOU TO TEST AND COMPARE THESE UNITS WITH SO-CALLED COMPETITIVE PRODUCTS. FOR UNIQUE DEVELOPMENTS IN ELECTRONIC ENGINEERING, ASK FOR MARANTZ.

Fisher Stereo, Hi-Fi Equipment



MODEL 100-T

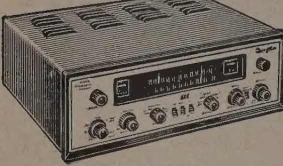
NEW MODEL 100-T STEREO FM-AM TUNER/AUDIO CONTROL

Ultra-sensitive FM-AM stereo tuner and an extremely flexible master audio control cente combined on one integrated chassis. Accommodates Model MPX-20 Multiplex Adapte directly on chassis. **Sensitivity:** FM requires 1 μv for limiting. **Hum:** Held to minimun with filtered DC on filaments of all preamp tubes except output. **Frequency Response** ±1 db, 20-20,000 cps. **Distortion:** Less than 0.2% at rated output of 5 v. **Controls:** FM Tuning; AM Tuning; Dual Bass; Dual Treble; Volume/Loudness/Power On-Off; Loudness On-Off; Hi-Filter On-Off; Lo-Filter On-Off; Channel Balance; AM Broad-Sharp Channel Reverse; Function (Mono Phono, Stereo Phono, AM, FM, FM-AM, FM MPX Aux. Stereo, Aux. Mono); Micro-Ray Tuning indicators. On rear are two phono level sets AM level set, MPX-Main channel separation control, 3-terminal FM antenna strip 3-terminal AM antenna strip. **Power Required:** 80 watts, 105-120 v., 50-60 cps. **Size** 15$\frac{1}{8}$″ w. x 11$\frac{15}{16}$″ d. x 4$\frac{13}{16}$″ h. Weight, 18 lbs.

Fisher Model 100-T Stereo Tuner-Preamplifier—Net Each. . . . . $\$249^{50}$

Fisher Model MC-1 Metal Cabinet—Simulated leather-covered. Net Each. . . .**$15.95**

Fisher Model MPX-20 Plug-In Multiplex Adapter—Net Each. **49.50**



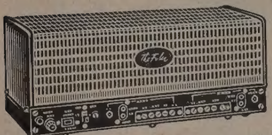
MODEL TA-600

NEW MODEL TA-600 FM-AM STEREO RECEIVER

Single, compact chassis contains AM-FM stereo tuner, master stereo audio control and stereo 40-watt amplifier. Features: Sensitive FM tuner with maximum gain, drift-free High gain AM tuner with rotatable ferrite antenna for noise-free signals, 10 kc and 4 kc bandwidths, and 10 kc whistle filter. Separate MicroRay tuning indicators and 3 antenna connections for each channel. Two independent channels with separate control sections comprise the audio section. **Sensitivity:** 1 μv, FM. **Power Output:** 20 watts each channel 70 watts total peak. **Frequency Response:** ±1 db, 25-20,000 cps. **Distortion:** Less than 0.5% harmonic at rated output. **Hum and Noise:** −90 db. **Controls:** FM Tuning; AM Tuning; independent Bass and Treble for each channel; Input Selector; Mono-Stereo Switch; Balance; Volume; Tape Monitor Switch; Low Filter; High Filter; AM Bandwidth; Loudness Switch. Five input level adjustments and phase reverse switch on rear panel. **Inputs and Outputs:** Total of 24; includes FM Multiplex, tape recorder, 4, 8 and 16 ohms. **Size:** 17″ w. x 14$\frac{1}{2}$″ d. x 4$\frac{13}{16}$″ h. Shipping Weight, 40 lbs.

Fisher Model TA-600 Stereo Receiver—Net Each. . . . . $\$349^{50}$

Fisher Model TA-6 Cabinet—Simulated leather. Net Each. **$17.95**

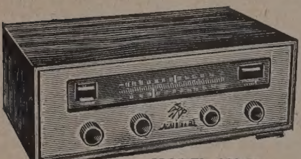


MODEL SA-300

NEW MODEL SA-300 STEREO POWER AMPLIFIER

Powerful unit meets critical laboratory standards; delivers 60 watts total output. **Features:** Controlled frequency input to improve electrostatic speaker performance. Provision for matching low damping factors used for some speakers. Dual-bias control circuit for perfect balance and stability. **Power Output:** 30 watts each channel. **Frequency Response:** ±0.5 db, 20-20,000 cps. **Distortion:** Less than 0.1% harmonic at full output; below 0.08% IM on first order tones per CCIR standards. **Hum and Noise:** −100 db. **Output:** 4, 8 and 16 ohms each channel; auxiliary AC outlet. **Controls:** Input level, AC balance, DC balance and AC hum for each channel; balance adjust and bias control. **Power Required:** 300 watts, 105-120 v. AC. 50/60 cps. **Size:** 16$\frac{5}{8}$″ w. x 7$\frac{1}{4}$″ d. x 6$\frac{1}{8}$″ h. Shipping Weight, 36 lbs.

Fisher Model SA-300 Stereo Amplifier—Net Each. . . . . $\$169^{50}$



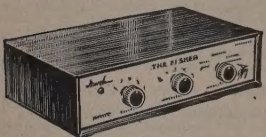
MODEL 101-R

MODEL 101-R FM-AM STEREO TUNER

Independent FM and AM channels for stereo or monophonic operation. Additional provision for FM Multiplex adaption. Meets FCC radiation requirements. **Sensitivity:** FM, 0.75 μv for 20 db quieting; AM, 3.5 μv for 0.5 v. output. **IF Bandwidth:** FM, −6 db at 18 kc; AM, −3 db at 13 kc (broad), and 5 kc (sharp). **Crosstalk:** −80 db between channels. **Frequency Response:** FM, ±1 db, 20-20,000 cps. **Outputs:** FM, FM Recording, AM, AM Recording, FM-AM and FM-AM Recording (monophonic), FM Multiplex. **Antenna Terminals:** FM dipole; FM external; AM external; AM ferrite. **Controls:** FM Selector (Off, Tune, Listen); FM Dial; AM Selector (Power Off, AM Off, Broad, Sharp); AM Dial; separate FM and AM audio output level adjustments on rear. Single dial glass has three scales—AM, FM, 0-100 logging. **Tubes:** 15, plus two germanium diodes. **Size:** 15$\frac{1}{8}$″ w. x 13″ d. x 4$\frac{13}{16}$″ h. Shipping Weight, 20 lbs.

Fisher Model 101-R AM-FM Stereo Tuner—Chassis only. Net Each. . . . . . . $\$229^{50}$

Fisher Model 10U-M (Mahogany), 10U-W (Walnut), or 10U-B (Blond) Cabinet—15$\frac{11}{16}$″ w. x 12$\frac{1}{2}$″ d. x 6″ h. Net Each. **$24.95**



MODEL MPX-10

MODEL MPX-10 STEREO MULTIPLEX ADAPTER

Permits reception of Crosby multiplex stereo broadcasts by direct connection to FM or AM-FM tuners with multiplex jack. Balanced matrix stage assures channel separation. Feed-thru connections permit reception of standard AM and FM signals when multiplex stereo is not being received. Connects directly to most Fisher tuners without modification. **Input Sensitivity:** 120 mv, high level; 30 mv, low level. **Hum and Noise:** −70 db. **Distortion:** Less than 0.5%. **Features:** Channel separation adjustment; auxiliary AC outlet. **Size:** 12$\frac{1}{4}$″ w. x 8″ d. x 2$\frac{5}{8}$″ h. Shipping Weight, 8 lbs.

Fisher Model MPX-10 Stereo Multiplex Adapter—Chassis only. Net Each. . . . $\$79^{50}$

Fisher Model 3C-M (Mahogany), 3C-W (Walnut), or 3C-B (Blond) Cabinet—Net Each. **$12.95**

MODEL X-101A

MODEL X-101A STEREO AUDIO CONTROL AND AMPLIFIER

Self-contained dual channel amplifier, preamp-equalizer with complete audio controls for stereo or monophonic operation. **Power Output:** 40 watts stereo, 75 watts peak on combined channels. **Frequency Response:** 20-20,000 cps. **Distortion:** 2% IM at rated output; 0.7% harmonic at rated output. **Hum and Noise:** 80 db below rated output. **Crosstalk:** 50 db between channels. **Inputs:** Six pairs for stereo; 12 for monophonic. **Outputs:** 4, 8 and 16 ohms on each channel; Recorder A and B for stereo or monophonic recording; Monitor for Recorder A channel. **Controls:** Input Selector (LP, 78, RIAA 1, RIAA 2, Tape, Tuner, Aux. 1, Aux. 2); Output Selector (Standard Stereo, Rev. Stereo, A + B Monophonic from Channel A Monophonic, B + A for Channel B Monophonic), Master Volume Control and AC Power; Channel Balance; Rumble Filter; Loudness Contour Switch; Bass Tone and Treble Tone for dual channel; Input Level; Amplifier Balance. **Tubes:** 11. **Size:** 15$\frac{1}{8}$″ w. x 13″ d. x 4$\frac{13}{16}$″ h., chassis only. Shipping Weight, 30 lbs.

Fisher Model X-101A Stereo Amplifier and Audio Control—Chassis only. Net Each. . . . . $\$194^{50}$

Fisher Model 10U-M (Mahogany), 10U-W (Walnut), or 10U-B (Blond) Cabinet—15$\frac{11}{16}$″ w. x 6″ h. x 12$\frac{1}{2}$″ d. Net Each. **$24.95**

MODEL 400-CA

MODEL 400-CA STEREO MASTER AUDIO CONTROL

Designed for remote control operation with Fisher Model RK-1 Stereo Remote Control. Has 16 input jacks and 9 controls for any combination of stereo or monophonic uses. Provides for stereo tapes, discs, AM-FM, FM-FM, FM Multiplex and mikes; monophonic tapes, discs, AM, FM, TV sound, short-wave and mike; recording stereo or monophonic with monitoring facilities; and, bass and treble crossover handling monophonic program sources into stereo systems for stereo effects. Four outputs in two pairs for stereo or monophonic use. Twelve stage audio circuit with shielded transformer for hum-free performance. Four AC outputs for driving other equipment. **Controls:** Input; Equalization; Output Selector; 3-position Rumble Filter; 3-position Loudness Contour; Volume and On-Off; Channel Volume Balance; Separate Bass and Treble, and 4 Input Level Adjustments. **Frequency Response:** Uniform, 20-25,000 cps. **Distortion:** Less than 0.15% for 2 volts output; 0.3% for 5 volts. **Hum and Noise:** Better than 85 db for high level inputs and 2 volts output; 65 db for 10 mv low level input and 2 volts output. **Tubes:** 7, plus rectifier. **Size:** 15$\frac{1}{8}$″ w. x 9″ d. x 4$\frac{13}{16}$″ h. Shipping Weight, 10 lbs.

Fisher Model 400-CA Stereo Master Audio Control—Chassis only. Net Each. $\$174^{50}$

Fisher Model 10U-M (Mahogany), 10U-W (Walnut), or 10U-B (Blond) Cabinet—15$\frac{11}{16}$″ w. x 6″ h. x 12$\frac{1}{2}$″ d. Net Each. **$24.95**

668-59D

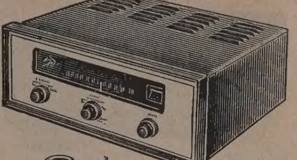
Fisher Stereo, Hi-Fi Equipment

MODEL FM-100 STEREO FM TUNER

Most sensitive tuner available, requiring only 0.8 μv for 20 db quieting with 300-ohm antenna. **Frequency Response:** ±½ db, 20-20,000 cps. **Distortion:** Less than 0.5% at full modulation. **Hum:** Absolutely none; uses matched germanium diodes. **Signal-to-Noise:** −60 db for 100 μv input. **Inputs:** One for each channel; external tuner can be used without disturbing any connections. **Outputs:** Two in each channel (one for an audio control or audio-control amplifier and one for a tape recorder), plus one for Multiplex Adapter. **Controls:** Tuning; Muting; Multiplex Separation; Selector (AC-Off, FM, MPX Stereo, Main Channel, MPX Channel). Four terminals for various antenna connections with FM dipole furnished; provision for connecting to outdoor antenna. **Tubes:** 10, plus 4 germanium diodes. **Power Required:** 50 watts, 105-120 v., 50-60 cps. **Size:** 15⅛″ w. x 13″ d. x 4 13/16″ h. Shipping Weight, 18 lbs.

Fisher Model FM-100 Stereo FM Tuner—Net Each.......................... $159.50

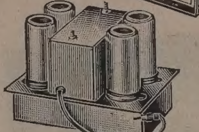
Fisher Model MC-1 Metal Cabinet—Simulated leather finish. Net Each......**$15.95**


MODEL FM-100

MODEL MPX-20 PLUG-IN MULTIPLEX ADAPTER

Adapts Model FM-100 Tuner for Crosby multiplex stereo broadcast reception. Installs directly on tuner chassis. **Sensitivity:** 75 mv. **Distortion:** Less than 0.5% at maximum modulation. **Hum and Noise:** −70 db. **Output:** 0.9-1.2 v., rms. **Tubes:** 4, plus 2 detector diodes. **Size:** 4⅝″ w. x 3¼″ d. x 3¾″ h. Shipping Weight, 2 lbs.

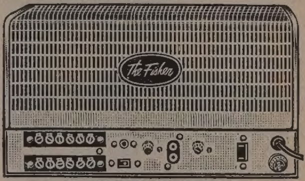
Fisher Model MPX-20 Multiplex Adapter—Net Each.......................... $49.50


MODEL MPX-20

MODEL SA-100 STEREO 50-WATT AMPLIFIER

Basic dual-channel power amplifier equipped with Center Channel output for adding third speaker system and amplifier. **Power Output:** 25 watts each channel. **Frequency Response:** ±0 db, −½ db, 20-20,000 cps. **Distortion:** IM, 0.3% at full power; harmonic, 0.8% at 25 watts music power. **Hum and Noise:** More than 90 db below rated output. **Sensitivity:** 1.0 v. for full rated output. **Inputs:** One for each channel; 250K ohms impedance. **Outputs:** 4, 8 and 16 ohms, each channel; low impedance Center Channel. **Damping Factor:** Inherent, 10, each section. **Controls:** (One each for each channel) Bias, Phase Inverter Balance, DC Balance, Input Level; plus single Mono-Stereo switch. **Tubes:** 7. **Power Required:** 160 watts, 105-120 v. AC, 60 cps; 3.2 amp fuse. **Size:** 12 9/16″ w. x 7⅛″ d. x 6¾″ h. Shipping Weight, 26½ lbs.

Fisher Model SA-100 50-Watt Stereo Amplifier—Net Each............... $119.50



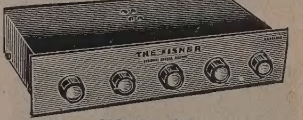
MODEL SA-100

MODEL 30-C MASTER AUDIO CONTROL

Single channel preamp-equalizer with complete audio controls designed particularly for converting existing monaural to stereo systems. Perfect for master monaural audio control, or two stacked units for master stereo control. **Features:** Six input jacks selectable from front panel. Recording output for direct connection. Four stage audio circuit with low-Z output stage to permit 30 ft. remote operation. **Gain:** 53 db magnetic phono; 56 db tape playback head; 54 db mike; 19 db for high level tuner and auxiliary inputs. **Frequency Response:** 20-20,000 cps. **Distortion:** 0.22% for 2 volts output; 0.3% for 3 volts output. **Hum and Noise:** Inaudible; −72 db tuner and aux. at 2 v. output; −60 db, phono, −56 db, tape; −62 db, mike. **Outputs:** Main for amplifier-speaker; recorder for direct take-off; two AC outlets. **Controls:** Input Selector (RIAA, Tape, Mike, Tuner, Aux. 1, Aux. 2); Volume; Rumble Filter/Loudness Contour; Bass Tone; Treble/AC Power on front panel. Two input level adjusts and hum control balance on rear panel. **Tubes:** 3 plus selenium rectifier. **Power Required:** 12 watts, 105-125 v. AC, 50-60 cps. **Size:** 12¼; w. x 8″ d. x 2⅝″ h., chassis only. Shipping Weight, 8 lbs.

Fisher Model 30-C Audio Control—Chassis only. Net Each................ $59.50

Fisher Model 3C-M (Mahogany), 3C-W (Walnut), or 3C-B (Blond) Cabinet—12 13/16″ w. x 7⅛″ d. x 3¼″ h. Net Each..**$12.95**



MODEL 30-C

MODEL 30-A 20-WATT HIGH FIDELITY AMPLIFIER

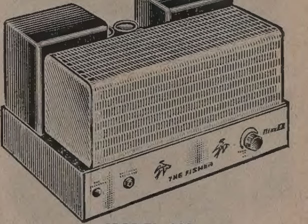
For one-channel stereo or monophonic use. **Features:** Controlled response; input level adjustment; phase inverter balance control. **Power Output:** 38 watts, peak. **Frequency Response:** 20-20,000 cps, ±1 db. **Distortion:** Under 1% at 20 watts. **Hum and Noise:** Completely inaudible. **Outputs:** 4, 8 and 16 ohms. **Size:** 12⅝″ w. x 5¼″ d. x 5⅝″ h. Shipping Weight, 14 lbs.

Fisher Model 30-A 20-Watt High Fidelity Amplifier—Net Each............. $59.50

MODEL "200" BASIC 60-WATT AMPLIFIER

Power Output: 60 watts, continuous; 160 watts, peak. **Frequency Response:** Uniform 20-20,000 cps, 0 and −0.5 db. **Harmonic Distortion:** Less than 0.3% at full rated output. **IM Distortion:** Less than 0.5% at full rated output. **Outputs:** Switch selected 4, 8 and 16 ohms; plus, special 70.7 v. for multiple speaker systems. **Controls:** Five, plus variable damping for speaker matching. **Other Features:** High voltage supply has choke-input filter system. Bias supply features dual-triode vacuum tube voltage regulator. Tube complement—includes 9 tubes and 1 selenium rectifier. **Size:** 14½″ w. x 12½″ d. x 8¾″ h. Shipping Weight, 50 lbs.

Fisher Model 200 Amplifier—Net Each.................................. $179.50

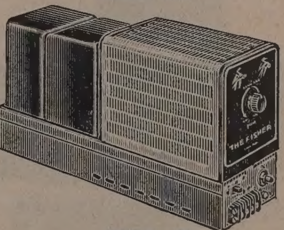


MODEL 200

MODEL "100" BASIC 30-WATT AMPLIFIER

Outstanding design carefully engineered for superior performance. Extra power reserve will drive even the lowest efficiency loudspeaker system with absolutely clean tonal output. **Power Output:** 30 watts constant within +0 db to −0.5 db; 70 watts peak handles orchestral transients up to 30 milliseconds without clipping, ringing, or raggedness. **Power Response:** Constant within 0 and −0.5 db, 20-20,000 cps. **Frequence Response:** Uniform ±0.5 db, 20-20,000 cps. **Harmonic Distortion:** Less than 1% at 30 watts. **IM Distortion:** Less than 1% at 30 watts; less than 0.5% at 10 watts. **Hum and Noise:** Inaudible; better than 88 db below 30 watts. **Input Requirements:** Only 1 volt for full output; 500,000 ohms. **Output Impedances:** 4, 8, 16 ohms, switchable. **Controls:** Z-Matic Variable Damping Control; Input Level Adjustment; Phase Inverter Balance Adjustment; and, Speaker Impedance Matching Switch. **Power Required:** 105-125 v. AC, 50-60 cps, 170 watts max. Convenient auxiliary AC receptacle. Neon pilot lamp. **Size:** 4½″ w. x 15½″ d. x 7″ h. Shipping Weight, 23 lbs.

Fisher Model 100 Amplifier—Net Each.................................. $119.50



MODEL 100

MODEL PR-66 STEREO PREAMP-EQUALIZER

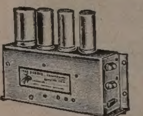
Self-contained, self-powered unit for low level magnetic stereo or RIAA monaural phono. Wiring modification permits use with stereo tape deck or microphones. Permits use of up to 30 ft. connecting cables. **Gain:** 40 db, measured at 1 kc. **Frequency Response:** ±2 db, 20-20,000 cps on RIAA. **Distortion:** 0.2% for 2 volts output. **Hum and Noise:** −60 db referred to 10 mv input. **Crosstalk:** Better than −60 db. **Inputs:** Two low level phono with RIAA. **Outputs:** Two to audio control; AC convenience outlet. **Adjustment:** AC hum balance. **Tubes:** 2, plus rectifier. **Size:** 8″ w. x 1⅞″ d. x 5½″ h. Shipping Weight, 4 lbs.

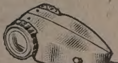
Fisher Model PR-66 Stereo Preamp-Equalizer—Net Each.................. $29.95

NEW MODEL RK-1 STEREO REMOTE CONTROL

Used with Fisher Model 400-CA Audio Control, this attachment permits adjusting volume and balance at the listening location. May be held in one hand while rotating control knobs with thumb or finger; controls left speaker with left knob, right speaker with right knob. Each control has a range of zero level to full volume. Compact plastic design includes control, adapter plug and 30 ft. of connecting cable. Ivory plastic case has gold trim. **Size:** 4″ h. x 2⅛″ w. x 1½″ d. Weight, 14 oz.

Fisher Model RK-1 Stereo Remote Control—Net Each..................... $17.95

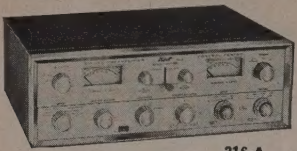

MODEL PR-66


MODEL RK-1

568X-59B

Pilot Stereo, Hi-Fi Equipment

Pilot quality components are renowned for their consistently high performance at a cost that is modest compared with equivalently engineered equipment of other manufacturers. One of the oldest, respected names in electronics, Pilot's experience provides a continuing advancement in engineering techniques, production efficiency and quality control. Whether your interest is a complete stereophonic system, or stereophonic components, there is a unit to meet your budget and needs. Compatible designs permit flexibility in your system by adding new units as you desire them. Designs are fully functional to assure simple operation and connection as well as mobility to suit your own room acoustics.


216-A

MODEL 216-A STEREO PREAMP AND AUDIO CONTROL

A professional stereophonic preamplifier. Two illuminated VU meters; automatic shutoff; meter function switch; 14 inputs (six high level and eight low level); optional ganging on tone controls; electronic crossover for monophonic bi-amplifier use; internal cathode followers permit use of audio cables up to 100 ft. **Outputs:** Audio, 1 v.; tape output, 0-1.3 v., adjustable for zero VU. **Frequency Response:** ±1 db, 20-20,000 cps. **Harmonic Distortion:** 0.2% at maximum sensitivity. **Hum and Noise:** 80 db below 1 volt. **Sensitivity:** Phono, 3 mv; tape head, 2 mv; mike, 3 mv; FM-AM, multiplex, tape, aux., 110 mv at 1 v. **Inputs:** (14). Two each for changer, turntable, tape head, microphone, FM-AM, multiplex, and tape recording. **Outputs:** (4). Two audio; two tape recording; three AC outlets. **Controls:** Selector (Mike, Tape Head, Phono, FM-AM, Multiplex, Tape Rec.); Mode (Stereophonic, Normal, Reverse; Monophonic Channel A, Channel B); Volume; Loudness; Balance; Bass (Equalized RIAA Automatically; LP, NAB, AES at calibrated points on tone controls); Treble (Equalized RIAA Automatically; LP, NAB, AES at calibrated points on tone controls); Power On-Off; 2 Record Level Controls; Monitor Switch. **Tubes:** 9, plus rectifier. **Size:** ⅝″ w. x 11″ d. x 5⅜″ h. Weight, 20 lbs.
Pilot Model 216-A Stereo Preamp and Audio Control—Net Each.......... $199⁵⁰

240

MODEL 240 30-WATT STEREO PREAMP-AMPLIFIER

Features similar to Model 245-A with non-shorting inputs, loudness control, automatic shutoff, and amplifier terminals for extension speakers with selector switch. **Power Output:** 15 watts per channel, 30 watts total. **Frequency Response:** ±1 db 20-20,000 cps. **Distortion:** Less than 1% harmonic. **Sensitivity:** Phono, mike, 3 mv; FM-AM, multiplex, tape rec., 110 mv. **Inputs:** Phono, tape, radio, multiplex, changer. **Outputs:** Speaker and tape. **Output Impedance:** 8 and 16 ohms per channel. **Controls:** Selector (Phono RC, Phono TT, FM-AM, Multiplex, Tape rec.); Mode (Stereophonic, Monophonic, Normal, Reverse, Channel A, Channel B); Volume; Loudness; Balance; Bass (Equalized RIAA Automatic, LP, NAB, AES optional at calibrated points); Treble (Equalized RIAA Automatic, LP, NAB, AES optional at calibrated points); Power On-Off. **Size:** 14¾″ w. x 10¾″ d. x 5⅝″ h. Weight, 23 lbs.
Pilot Model 240 Stereo Preamp-Amplifier—Net Each.................... $129⁵⁰

245-A

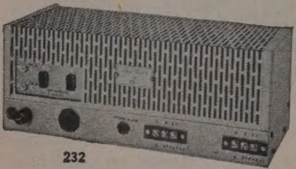
MODEL 245-A 40-WATT STEREO PREAMP-AMPLIFIER

Complete automatic shutoff after last record. Monophonic operation from either Channel A or Channel B input; stereophonic or monophonic operation for both speaker systems; balance control; dual microphone inputs. **Power Output:** 20 watts continuous each channel, 40 watts peak. **Frequency Response:** ±1 db, 20-20,000 cps. **Distortion:** Less than .5% IM at full output; less than 1% harmonic. **Hum and Noise:** 80 db below full output. **Sensitivity:** Mike and Phono, 3 mv; tape head, 2.0 mv; FM-AM, Multiplex, Tape, 110 mv. **Inputs:** Phono, tape head, mike, tuner, aux. **Outputs:** Speaker, and dual tape. **Output Impedance:** 8, 16 ohms. **Controls:** Selector (Mike, Tape NAB equalized, Phono, FM-AM, Multiplex, Tape Rec.); Mode(Stereophonic, Monophonic, Normal, Reverse, Channel A, Channel B); Volume; Loudness; Balance; Bass (Equalized RIAA Automatic, LP, NAB, AES, optional at calibrated points); Treble (Equalized RIAA Automatic, LP, NAB, AES, optional at calibrated points); Power On-Off. **Tubes:** 11, plus rectifier. **Size:** 14⅝″ w. x 12¾″ d. x 5″ h. Weight, 30 lbs.
Pilot Model 245-A Stereo Preamp-Amplifier—Net Each.................. $199⁵⁰

210

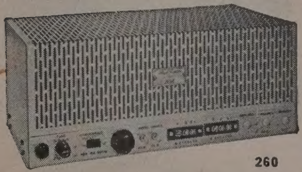
MODEL 210 STEREO PREAMPLIFIER AND POWER SUPPLY

Features similar to Model 690A. **Frequency Response:** ±1 db, 20-20,000 cps. **Harmonic Distortion:** 0.2% at maximum sensitivity. **Hum and Noise:** 80 db below 1 v. **Sensitivity:** Phono, 3 mv; tape head, 2 mv. **Inputs:** 12, 6 each channel. **Outputs:** Audio, tape. **Controls:** Power Switch (Off, On, Automatic Shutoff); Selector (Mike, Tape Head NAB equalized in RIAA position, Phono, FM-AM, Multiplex, Tape Rec.); Mode (Stereo, Monaural, Normal, Reverse, Channel A, Channel B); Balance; Volume; Bass (equalized RIAA, LP, NAB, AES); Treble (equalized RIAA, LP, NAB, AES). **Tubes:** 4. Four-foot interconnecting cables (power, channel A audio out, channel B audio out).
Pilot Model 210 Stereo Preamplifier—Net Each.......................... $89⁵⁰
Pilot Model P-10 Power Supply—For Model 210. Net Each..................$19.50


232

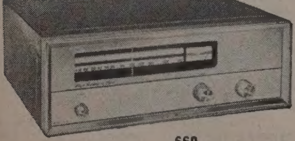
MODEL 232 BASIC STEREO AMPLIFIER

Matches Models 210 and 216A. Bi-channel; automatic shut-off after last record; dual AC outlets. Supplies power for Model 210. **Power Output:** 20 w. each channel, 40 w. total special transformers for maximum power response. **Frequency Response:** 20 to 20,000 cps **Distortion:** 1.5% IM; 1% harmonic. **Hum:** 90 db below full power. **Sensitivity:** 1 v. for full power output. **Impedances:** Input, 470,000 ohms; output, 8 or 16 ohms. **Tubes:** 7, plus rectifier. **Size:** 13⅝″ w. x 5¾″ d. x 5½″ h.
Pilot Model 232 Basic Stereo Amplifier—Net Each.......................... $89⁵⁰


260

MODEL 260 BASIC STEREO AMPLIFIER

Matches Pilot tuners and preamplifiers in all important electrical, mechanical, magnetic thermal and operational properties. Dual electrical power outlets to connect associated equipment. Output transformers are constructed of grain-oriented steel with special interleaved windings for high efficiency. Individual bias and balance controls are provided to adjust operating point and accurately balance the output tubes of each channel. **Power Output:** 40 watts each channel; 80 watts total output. **Frequency Response:** 20-20,000 cps **Distortion:** 1.0% harmonic. **Hum and Noise:** 90 db below full output. **Sensitivity:** 0.8 v for full power output. **Input Impedance:** 470,000 ohms. **Output Impedance:** 8 or 16 ohms per channel. **Tubes:** 7, plus 2 rect. **Size:** 15⅞″ w. x 7¾″ d. x 6¾″ h. Weight, 35 lbs. Complete with brass finished protective cover.
Pilot Model 260 Basic Stereo Amplifier—Net Each.......................... $139⁵⁰


660

MODEL 660 DE LUXE FM TUNER

Interstation noise muting with adjustable threshold control and optional defeat. Tuning Meter for precise center-of-channel tuning for lowest distortion. High gain IF circuitry comprises 3 IF stages and 2 limiters (1 gated beam dynamic limiter; 1 saturation type) FM multiplex output jack for stereo broadcast reception with external multiplex demodulator. Built-in FM power-line-cord antenna; provision for external antenna. Flywheel tuning. Cathode follower output. Meets FCC radiation requirements. **Tuning Range:** 88 to 108 mc. **Sensitivity:** 1 μv with 30% modulation, for 20 db quieting. **Band Width:** 200 kc at 6 db points. **Audio Output:** Cathode follower with 500-ohm output impedance. **Tubes:** 9 tubes, 4 diodes, plus rectifier. **Size:** 14⅝″ w. x 11″ d. x 5½″ h.
Pilot Model 660 De Luxe FM Tuner—Net Each............................ $149⁵⁰

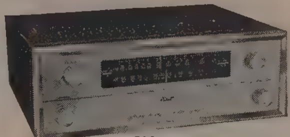
662-59B

Pilot Stereo, Hi-Fi Equipment

MODEL 580 STEREO FM-AM TUNER

Independent FM and AM sections; may be used individually for FM or AM alone, or simultaneously for FM-AM stereophonic broadcasts. Provides FM multiplex reception with an external multiplex demodulator. Low noise, dual-triode golden grid cascode RF amplifier in the FM section, and interstage circuit tuning, prevents drift. Temperature compensated oscillator in this circuit and wide band tuning (1000 kc wide) increases drift-free reception. Pilot Centra-Tune FM tuning indicator facilitates precise tuning to center-of-channel for the lowest distortion. Audio output constant and independent of signal level. High gain IF circuitry includes two IF stages and two limiters, with excellent impulse-noise suppression. **Features:** FM multiplex output jack; built-in FM power-line-cord antenna; facilities for 300-ohm twin lead and 72-ohm coax included. High gain pentode in AM section for RF amplifier, with accurately tracked antenna and interstage tuning, a triode-pentode oscillator-mixer and a steep-skirted IF stage. AM section also includes a 10 kc interstation whistle filter with narrow rejection band, built-in AM antenna and temperature compensated AM oscillator to assure freedom from drift. **Sensitivity:** FM, 1.5 μv; AM, 3 μv. Dual cathode follower outputs permit long cables without signal loss. **Tubes:** 10, two indicator tubes, four diodes, 1 rectifier. **Size:** 14⅝" w. x 14⅜" d. x 5½" h. Weight, 24 lbs.

Pilot Model 580 Stereo FM-AM Tuner—Net Each...................... $\$179^{50}$


580

MODEL 590 STEREO FM-AM TUNER AND DUAL PREAMP

Tuner specifications are identical to Model 580 above. Preamplifier includes four independent tone controls with Pilot Tru-Lok for optional ganging. Three pairs of high level inputs for permanent simultaneous connection of FM-AM tuner, multiplex adapter and tape recorder. Two pairs of low level inputs for permanent connection of record changer and turntable. All inputs non-shorting type. Direct tape playback facilities. Front panel speaker selector switch; electronic crossover for monophonic operation. Loudness switch provides full sound-spectrum listening at low levels. Automatic shutoff enables changer to turn off the entire system after last record is played. Monophonic position on mode switch automatically cuts out undesired vertical stereophonic cartridge response when playing monophonic recordings. **Size:** 14⅝" w. x 14½" d. x 5½" h. Weight, 24 lbs. Complete with enclosure.

Pilot Model 590 Stereophonic FM-AM Tuner and Dual Preamplifier—Net Each.. $\$239^{50}$

590

MODEL 690-A STEREO FM-AM TUNER-DUAL PREAMP

Tuner Features: Interstation noise muting with adjustable threshold control and optional muting defeat; center-of-channel tuning meter. High gain IF circuitry comprises 3 IF stages and 2 limiters. Built-in antennas; power-line-cord for FM, ferrite cord for AM, provision for external antenna. Temperature compensated AM oscillator; flywheel tuning. Meets FCC radiation requirements. **Stereophonic Preamplifier Features:** Two preamplifiers with ganged controls; complete automatic shutoff after last record; single knob four-volume control units; feedback tone control circuits; large signal handling capacity. Low impedance tape recording output permits use of long cable without affecting frequency response. Matched to Models SA-232 and SA-260 amplifiers. **Frequency Response:** ± 1 db, 20-20,000 cps. **Sensitivity:** FM, 1 μv for 20 db quieting; AM, 2 μv for 1 v. DC at detector. **Whistle Filter:** More than 50 db attenuation at 10 kc. **Inputs:** 14, 7 each channel. **Outputs:** Dual cathode follower and tape. **Controls:** Separate FM and AM Tuning; Power (On-Off, Automatic Shutoff); Bass (equalized RIAA, LP NAB, AES); Treble (equalized RIAA, LP, NAB, AES); Volume; Balance, Mode (Stereo, Monaural, Normal, Reverse, Channel A, Channel B); Selector (Mike, Tape NAB equalized in RIAA position, Phono, FM-AM, Multiplex, Tape Rec.); FM-Muting Switch; AM Bandwidth Switch. **Tubes:** 18 plus 5 diodes and rectifier. **Size:** 14⅝" w. x 14½" d. x 5½" h. Weight, 25 lbs.

Pilot Model 690-A Stereo FM-AM Tuner and Dual Preamplifier—Net...... $\$289^{50}$

690-A

MODEL 680 STEREO FM-AM TUNER

Professional stereophonic tuner offering the ultimate in reception, even in difficult fringe areas. Independent FM and AM sections may be used separately for FM or AM alone, or simultaneously for FM-AM stereophonic broadcasts. Provision is made for FM Multiplex stereophonic reception with an external Multiplex demodulator. **Features:** Sensitivity, 1 μv for 20 db quieting; low noise dual-triode, golden-grid cascode RF amplifier with accurately tracked antenna and interstage tuning. **Sensitivity:** FM, 1μv; AM, 2 μv. Dual cathode follower outputs permit long cables without signal loss. **Tubes:** 14, plus four diodes and 1 rectifier. **Size:** 14⅝" w. x 14⅜" d. x 5½" h. Weight, 25 lbs. Complete with enclosure.

Pilot Model 680 Stereophonic FM-AM Tuner—Net Each.................. $\$219^{50}$

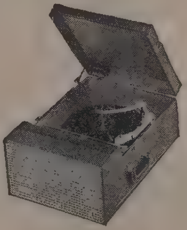
680

MODEL 1060 STEREO PORTABLE PHONO

Requires only addition of external speaker, S-160. Dual preamplifier and dual channel push-pull amplifier. RIAA, LP, AES, NAB playback characteristics. Supplied with stereo cartridge compatible for both stereo and monaural records. Play stereophonic or monaural records interchangeably. Complete automatic shutoff after last record, with manual defeat. **Changer:** Garrard RC-121/Mark II stereo plays 7", 10", 12" records. **Intermixing:** Will intermix ten 12" and 10" records in any order. **Speeds:** 16⅔, 33⅓, 45, 78 rpm. **Power Output:** 20 watts total; 10 watts per channel, music power. **Frequency Response:** ±1 db, 20-20,000 cps. **Distortion:** 1% at full output. **Sensitivity:** (For full power output per channel) Phono, 5 mv; FM-AM, Multiplex, 60 mv. **Inputs:** Phono (2), FM-AM (2), Multiplex (2). **Speaker Output Impedance:** 8 ohms each channel. **Controls:** Selector; Volume-Power; Stereo Balance; Mode (Rear Panel: Stereo Channel A, Channel B); Bass Tone; Treble Tone; Pick-up Switch. **Tubes:** 8, plus rectifier. **Power Requirements:** 105/120 v. AC, 60 cps, 120 watts. **Size:** 17⅝" w. x 23⅜" d. x 10½" h. Shipping Weight, 48 lbs.

Pilot Model 1060 Stereo Portable Phono—Net Each...................... $\$219^{50}$

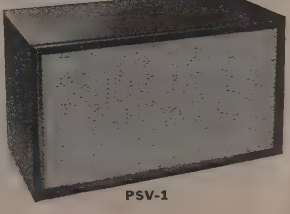
Pilot Model S-160 Auxiliary Speaker—Match speaker. Net Each............**$39.50**


1060

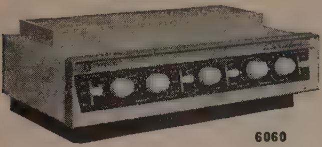
MODEL PSV-1 STEREO VOICE SYSTEM

Compact three-way "bookshelf" speaker with exceptionally clean bass response and realism. Provides unparalleled presence, smoothness of response and tonal balance for optimum stereophonic realism. Speaker achieves wide sound dispersion in either horizontal or vertical positions with the exclusive Acoustimatic Turret —an arrangement of mid- and high-range speakers that may be oriented from outside the enclosure. Clean, solid bass is furnished by a special 12" Air-Flex heavy duty woofer, front mounted to seal the air-tight, orlon-filled enclosure. Two 3" tweeters and two 6" midrange units have been angled for wide sound distribution. Mounting designed to eliminate the intervening ducts of conventional thick baffle boards, removing possibility of distortion and tone coloration. Separate presence and brilliance controls supplied to match the PSV-1 to individual acoustic requirements. **Speakers:** Pilot Model 53 Air-Flex 12-inch woofer; two Pilot Model 40 6" cone type midrange speakers; two Pilot Model 44 3" cone type tweeters. **Frequency Range:** Woofer, 40-800 cps; mid-range, 800-8000 cps; tweeters, 8000 to over 16,000 cps. **Impedance:** 16 ohms. **Frequency Response:** (Overall) 40-16,000 cps. **Crossover Network:** Air core inductance capacitance, 6 db/octave. Crossover frequencies, 800 and 8,000 cps. Enclosure fully finished on four sides in a choice of hand-rubbed mahogany or walnut (specify). **Size:** 25¾" x 14¼" x 12" d. Shipping Weight, 45 lbs.

Pilot Model PSV-1 Stereo Voice—Net Each.......................... $\$139^{50}$


PSV-1

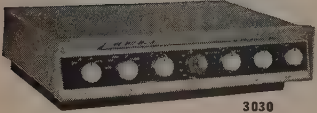
Bell Stereo, High Fidelity Equipment


6060

MODEL 6060 "CARILLON" STEREO 60-WATT AMPLIFIER

Has all the features you'll ever need for the production of finest high fidelity sound from stereo records, stereo tape, stereo FM-AM tuner. All operating controls located on front panel, built-in preamplifier. Separate bass and treble tone controls for both channels. Continuously variable loudness control automatically compensates for bass and treble at low listening levels. Balance control helps maintain the correct acoustical balance between any two speakers. Hi and Lo noise filters reduce turntable rumble, record scratch and tape hiss. Can play stereo in two rooms. Play either set of stereo speakers, or both sets at the same time. Handsomely crafted in rich saddle tan vinyl. **Power Output:** 30 watts rms each channel; total 60; peak 120. **Power Response:** 20-20,000 cps at 30 watts ± 1 db. **Frequency Response:** 15-30,000 cps ± db. **Distortion:** Less than 1% total harmonic distortion at 30 watts at 1,000 cps. **Hum Level:** 71 db below rated output. **Inputs (7):** Microphone; NAB tape head; magnetic phono; ceramic phono; tuner, tape preamplifier; auxiliary. **Outputs:** 4, 8, 16 ohms and high impedance for recording. **Controls:** Selector, (Mike, Tape Head, RIAA, LP, EUR, Tuner, Tape Amp, Aux); Left Channel Bass, +15 db, −18 db at 50 cps; Left Channel Treble, +9 db, −18 db at 10 kc; Balance Control; Continuously Variable Loudness Control; Right Channel Bass, +15 db, −18 db at 50 cps; Right Channel Treble, +9 db, −18 db at 10 kc; Level Control combined with Push Pull Power On-Off Switch. **Lever Switch (4):** Lo Filter: 40 cps cutoff, Off, 80 cps cutoff; Hi Filter: 8 kc cutoff, Off, 4 kc cutoff; Function: Stereo Reverse, Stereo, Monophonic; Stereo Speaker Selector: AB, A, B. **Rear Chassis:** Individual left and right level set controls for tuner, tape amp inputs; 2 AC convenience outlets operated by AC power switch. **Tubes (11):** 4-EL34/6CA7, 6-ECC83/12AX7, 1-5V3. **Power Required:** 230 watts, 117 v. AC, 60 cps. **Size:** 16″ w. x 11½″ d. x 6¼″ h. Shipping Weight, 40 lbs.

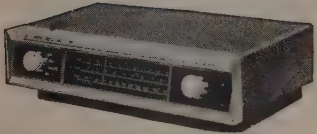
Bell Model 6060 "Carillon" Stereo Amplifier—Net Each.............. **$219.95**
Zone 2: **229.95**


3030

MODEL 3030 STEREO 30-WATT AMPLIFIER

Two-channel stereo amplifier for playing stereo records, stereo tapes and stereo FM-AM tuners. **Power Output:** 15 watts rms each channel; total 30; 60 watts peak. **Frequency Response:** 20-20,000 cps, ±0.5 db. **Distortion:** Harmonic, 0.5% at 1 db below 15 watts. **Hum:** 79 db below 15 watts. **Inputs:** (5) Tape; Magnetic Phono; Ceramic Phono; Tuner; Aux. **Outputs:** 4, 8, 16 ohms and High-Z for recording. **Controls:** Function (Tape, EUR, RIAA, LP, Tuner, Aux.); Noise Filter (Off, High, Low, Both); Balance (with Monophonic switch); Loudness (with AC push-pull On-Off); Level (with built-in reverse); Bass; Treble; Tuner Set Level (on rear); Output Parallel (on rear); Hum Balance (on rear). **Tubes (11):** 4-6V6GT; 6-12AX7 (ECC83); 1-EZ81 (6CA4). **Power Required:** 135 watts at 117 v., 60 cps. **Size:** 16″ w. x 11⅜″ d. x 4½″ h. Shipping Weight, 22 lbs.

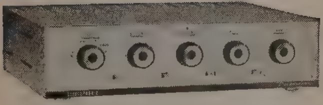
Bell Model 3030 Stereo Amplifier—Net Each...................... **$149.95**
Zone 2: **152.95**


2520M

MODEL 2520M FM-AM TUNER

Shielded construction and grounded grid RF stage conforms to FCC radiation specifications. Features illuminated dial with extra logging scale for exact tuning; Armstrong FM circuit; Foster-Seeley discriminator; automatic frequency control for FM when needed. Built-in line cord FM antenna; ferrite loopstick antenna for AM; connection for external antenna. **Sensitivity:** 3.5 μv for 20 db s/n, 6 μv for 30 db s/n, FM; 20 μv for 20 db s/n, AM. **Drift:** 2 kc with AFC, FM; negligible on AM. **Frequency Response:** 20-20,000 cps ±1 db, FM; 20-5,000 cps ±3 db, AM. **Hum and Noise:** 60 db below 100% modulation, FM; 50 db below 100% modulation, AM. **Selectivity:** 6 db down at 200 kc, FM; 6 db at 11.7 kc, AM. **Controls:** Off; AM; FM with AFC; FM without AFC; Tune. **Tubes (8):** 1-6AB4, 1-12AT7, 2-6BA6, 1-6AL5, 1-6BE6, 1-6X4, 1-6AU6. **Power Required:** 40 watts, 117 v., 60 cps. **Size:** 13½″ w. x 10½″ d. x 4½″ h. Shipping Weight, 14 lbs.

Bell Model 2520M FM-AM Tuner—Net Each.......................... **$95.00**
Zone 2: **97.50**


2221

MODEL 2221 PACEMAKER 20-WATT STEREO AMPLIFIER

Two-channel stereo amplifier plays monophonic and stereo records, tapes and FM-AM tuner. **Power Output:** 10 watts each channel at 2% total harmonic distortion; total, 20; peak, 40 watts. **Frequency Response:** 20-20,000 cps, ±1 db. **Hum Level:** 65 db below 10 watts. **Inputs:** Magnetic and ceramic phono; tape head; tuner, aux. **Outputs:** 4, 8, 16 ohms and Hi-Z for recording. **Controls:** Selector-Equalizer (Tape Head, EUR, RIAA, LP, Tuner, Aux); Balance with built-in Monophonic switch; Volume; Bass; Treble/AC On-Off; Rumble Filter; Scratch Filter; Stereo Reverse; Output. **Tubes (10):** 4-6V6GT, 1-12AU7 (ECC82), 4-12AX7 (ECC83), 1-6CA4 (EZ81). **Power Required:** 105 watts, 117 v., 60 cps. **Size:** 14¼″ w. x 11″ d. x 3⅝″ h. Shipping Weight, 14½ lbs.

Bell Model 2221 Stereo Amplifier—Net Each........................ **$ 99.95**
Zone 2: **101.95**

2222

MODEL 2222 PACEMAKER FM-AM STEREO TUNER

A perfect matching stereo tuner for Model 2221 Pacemaker Stereo Amplifier. Has all the features you need for reception of your favorite stereo and radio broadcasts. Separate FM-AM sections can be tuned independently of each other. Automatic gain control in each section maintains equal volume of the signal going to the amplifier. Single-knob selector switch provides monophonic or stereo operation without changing output connections, automatically feeds any monophonic program through both channels of your stereo amplifier; automatic frequency control and multiplex output are also provided. **Sensitivity:** FM, 6 μv for 20 db signal to noise ratio; AM, 20 μv for 0.1 v. output at 30% modulation. **Selectivity:** FM, 6 db down at 200 kc; AM 6 db down at 11.5 kc. **Image Rejection:** 28 db. **Hum and Noise:** 50 db below 100% modulation. **Controls:** On-Off; AM/FM; AFC; Tune. **Output (Both Sections):** 2 v. at 100% modulation. **Tubes (10):** FM, 1-6AB4, 1-ECC85/6AQ8, 2-6AU6, 1-6AL5, 1-6AV6; AM, 1-6BE6, 1-6BA6, 1-6AV6, 1-EZ80/6V4. **Power Required:** 45 watts 117 v. AC. **Size:** 14¼″ w. x 10″ d. x 3⅝″ h. Shipping Weight, 11 lbs.

Bell Model 2222 FM-AM Stereo Tuner—Net Each.................... **$109.95**
Zone 2: **114.95**

2216

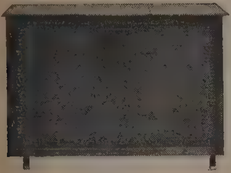
MODEL 2216 PACEMAKER FM TUNER

Provides quality FM reception at a low cost. Features include logging scale, AFC switch, multiplex output, built-in line cord FM antenna, drift-free circuit. **Sensitivity:** 6 μv for 20 db signal to noise ratio. **Selectivity:** 6 db down at 200 kc. **Image Rejection:** 28 db. **Hum and Noise:** 50 db below 100% modulation. **Output:** 2.5 v. at 100% modulation. **Tubes (7):** 1-6AB4, 1-ECC85/6AQ8, 2-6AU6, 1-6AL5, 1-6AV6, 1-EZ80/6V4. **Size:** 11½″ w. x 10″ d. x 3⅝″ h. Shipping Weight, 9 lbs.

Bell Model 2216 FM Tuner—Net Each................................ **$69.95**
Zone 2: **74.95**

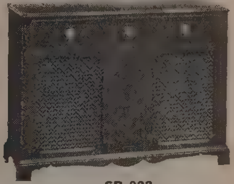
FOR INTEGRITY IN MUSIC

"There is nothing finer than a Stromberg-Carlson"

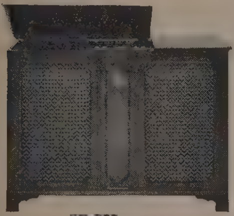


SP-901

SP-921

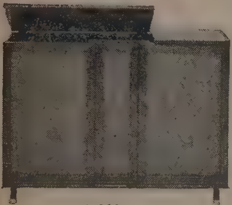


SP-922



SP-902

SP-903



SP-911

SP-912

SP-913

STROMBERG-CARLSON INTEGRITY SERIES OF STEREO COMPONENT ENSEMBLES

The Integrity Series of stereo component ensembles listed here are made up of Stromberg-Carlson audio-accepted components, combined with Stromberg-Carlson high fidelity speaker systems housed in handsome, furniture-styled cabinets of your choice. Whenever a significant development in music reproduction occurs, Stromberg-Carlson will have the new equipment needed ready to install in your stereo component ensemble, keeping it perpetually up-to-date. With the addition of a separate matching speaker system, the exclusive "Stereo-Choice Switch" makes it possible for you to select the exact amount of separation you want. Changers, record storage, and all controls are easily accessible from the top of all stereo component ensembles, except Models SP-991 and SP-993, which open from the front.

SP-901 CONTEMPORARY STEREO PHONOGRAPH

Quality audiophile components by Stromberg-Carlson, accepted and approved by music lovers throughout the world; outstanding performance by "Acoustical Labyrinth" speaker systems. Authentic contemporary styling by Federico in all-hardwood, lumber-core veneers of mahogany, walnut (oil or lacquer finish) or limed oak. An ideal combination of sight and sound for those who appreciate aesthetic integrity in all forms. **Component Complement:** Garrard RC-121 four speed changer, with stereo, diamond needle cartridge; ASR-333 stereo control amplifier; two RS-401 "Acoustical Labyrinth" speaker systems. "Stereo-Choice Switch" and record storage compartment included. **Size:** 48" w. x 18" d. x 35" h.

Stromberg-Carlson Model SP-901-M (Mahogany) **Console**—Net Each..... $\$349^{95}$

Stromberg-Carlson Model SP-901-WO (Walnut Oil), **SP-901-WL** (Walnut Lacquer), or **SP-901-K** (Limed Oak)—Net Each.................................**$359.95**

SP-902 TRADITIONAL STEREO PHONOGRAPH

Authentic design in every detail. Built of all-hardwood veneers in mahogany or lacquered walnut, its handsome appearance is matched by its ability to reproduce the music you love in full stereo. **Component Complement and Console Size:** Same as Model SP-901.

Stromberg-Carlson Model SP-902-M (Mahogany) **Console**— Net Each.................................. $\$399^{95}$

Stromberg-Carlson Model SP-902-WL (Walnut Lacquer) **Console**—Net Each.**$409.95**

SP-903 FRENCH PROVINCIAL STEREO PHONOGRAPH

French Provincial styling and unparalleled music reproduction are the dominant features of the SP-903. Authentic styling in all-hardwood, lumber-core cherry veneers make this stereo phonograph ensemble a handsome addition to your home. **Component Complement and Console Size:** Same as Model SP-901.

Stromberg-Carlson Model SP-903-C (Cherry) **Console**—Net Each......... $\$399^{95}$

SP-911 CONTEMPORARY STEREO PHONOGRAPH

Combines the best in sight and sound. Genuine, audio-accepted Stromberg-Carlson high fidelity components, including "Acoustical Labyrinth" speaker systems, guarantee the quality of performance. The cabinet of authentic contemporary styling by Federico is made of all-hardwood, lumber-core veneers in mahogany, walnut (oil or lacquer finish) or limed oak. **Component Complement:** Garrard RC-88 four speed changer, with Shure M7D stereo diamond needle cartridge; ASR-433 stereo "24" control amplifier; two RS-404 "Acoustical Labyrinth" speaker systems. "Stereo-Choice Switch" and record storage compartment included. **Size:** 48" w. x 18" d. x 35" h.

Stromberg-Carlson Model SP-911-M (Mahogany) **Console**—Net Each..... $\$449^{95}$

Stromberg-Carlson Model SP-911-WO (Walnut Oil), **SP-911-WL** (Walnut Lacquer), or **SP-911-K** (Limed Oak)—Net Each.................................**$459.95**

SP-912 TRADITIONAL STEREO PHONOGRAPH

Handsome to look at, delightful to hear. Authentic traditional styling in all-hardwood, lumber-core veneers of mahogany or lacquered walnut. The formal elegance of the SP-912 could be the perfect answer for your high fidelity stereo requirements while adding to the beauty of your home. **Component Complement and Console Size:** Same as Model SP-911.

Stromberg-Carlson Model SP-912-M (Mahogany) **Console**— Net Each.................................. $\$499^{95}$

Stromberg-Carlson Model SP-912-WL (Walnut Lacquer) **Console**—Net Each.**$509.95**

SP-913 EARLY AMERICAN STEREO PHONOGRAPH

Authentic Early American styling by Federico combined with matchless stereo music reproduction. Its audio performance is unmatched, and its authenticity of design in all-hardwood maple veneers will compliment your other Early American pieces. **Component Complement and Console Size:** Same as SP-911.

Stromberg-Carlson Model SP-913-MP (Maple) **Console**—Net Each....... $\$499^{95}$

SP-921 CONTEMPORARY STEREO RADIO-PHONOGRAPH

A combination of trim good looks and superior music reproduction, the SP-921 offers reproduction from both stereo records and AM-FM broadcasts. The handsome cabinet in authentic contemporary styling by Federico is made of all-hardwood, lumber-core veneers in mahogany, walnut (oil or lacquer finish) or limed oak. For your listening pleasure, the world-renowned high fidelity components by Stromberg-Carlson, including the exclusive "Acoustical Labyrinth" speaker systems, guarantee the audio performance you expect in a fine high fidelity system. **Component Complement:** Garrard RC-88 four speed changer with Shure M7D stereo diamond needle cartridge; SR-445 AM-FM stereo tuner; ASR-433 stereo "24" control amplifier; two RS-404 "Acoustical Labyrinth" speaker systems. "Stereo-Choice Switch" included. **Size:** 48" w. x 18" d. x 35" h.

Stromberg-Carlson Model SP-921-M (Mahogany) **Console**—Net Each..... $\$599^{95}$

Stromberg-Carlson Model SP-921-WO (Walnut Oil), **SP-921-WL** (Walnut Lacquer), or **SP-921-K** (Limed Oak)—Net Each.................................**$619.95**

SP-922 TRADITIONAL STEREO RADIO-PHONOGRAPH

Superb stereo music reproduction from both records or AM-FM broadcasts in a handsome, authentic traditional styled cabinet made of genuine all-hardwood, lumber-core veneers in mahogany, or lacquered walnut. The beauty of music reproduction combined with the authentic beauty of the cabinet make this a fine stereo system for your home. **Component Complement and Console Size:** Same as SP-921.

Stromberg-Carlson Model SP-922-M (Mahogany) **Console**—Net Each..... $\$649^{95}$

Stromberg-Carlson Model SP-922-WL (Walnut Lacquer) **Console**—Net Each.**$669.95**

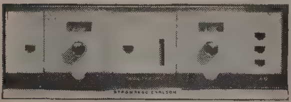
674-59A

FOR INTEGRITY IN MUSIC

"There is nothing finer than a Stromberg-Carlson"

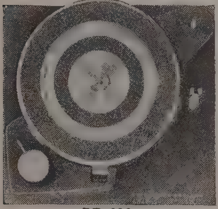
FM-443

AM-442



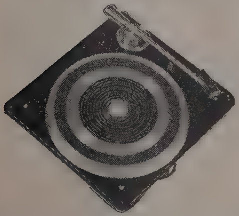
SR-445

SR-440

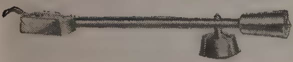


PR-499

PR-88



PR-500



RA-498

HIGH FIDELITY STEREO COMPONENTS

FM-443 FM TUNER

Exceptionally sensitive, low noise FM reception. Sensitivity-oriented Local-Distant switch in audio output stage results in a rated specification on local stations of 2 μv for 40 db quieting. Easy, accurate tuning. Temperature controlled circuits eliminate drift. Meets FCC requirements for minimum radiation. Space on the chassis for multiplex adapter. Self-powered with auxiliary power for AM-441 tuner and/or multiplex adapter. **Sensitivity:** On 300-ohm antenna input, 2 μv for 20 db quieting; 4 μv for 30 db quieting. **Tuning Range:** 88-108 mc. **Bandwidth:** 200 kc. **Frequency Response:** 20-20,000 cps. **Outputs:** Audio, detector, and multiplex. **Detector Characteristics:** Peak separation of 475 kc; linear slope 350 kc. **Controls:** Tuning; AFC Switch; Local-Distant Switch; Off-On Switch. **Tubes:** 1-6AQ8, 3-6AU6, 1-6C4, 1-EM84. **Size:** 7¼" w. x 12" d. x 4⅝" h.
Stromberg-Carlson Model FM-443 FM Tuner—Gold and white or black and brushed chrome finish (specify). Less top cover. Net Each.................. **$79.95**

AM-441 AND AM-442 AM TUNERS

Tuned RF stage; 3-gang variable tuning condenser. Local-Distant switch provides additional 20 db quieting on local stations. Dual antenna inputs, adjustable ferrite loop and external. **Tuning Range:** 540-1,600 kc. **Bandwidth:** 9 kc. **Frequency Response:** 20-7,000 cps, down 7 db at 7,000 cps. **Controls:** Tuning; Local-Distant Switch; On-Off. **Tubes:** 1-6BE6, 2-6BA6, 1-6AT6. **Size:** 7¼" w. x 12" d. x 4⅝" h.
Stromberg-Carlson Model AM-442 AM Tuner—With power supply. Gold and white or black and brushed chrome finish (specify). Less top cover. Net Each. **$59.95**
Stromberg-Carlson Model AM-441 AM Tuner—Same as above, less power supply. Net Each.. **$49.95**

SR-445 AM-FM STEREO TUNER

A combination of AM-441 and FM-443 tuners; has specifications and tubes of both with individual circuits. Operates as AM, FM or together as AM-FM stereo tuner. **Size:** 13½" w. x 12" d. x 4⅝" h.
Stromberg-Carlson Model SR-445 AM-FM Stereo Tuner—Gold and white or black and brushed chrome finish (specify). Less top cover. Net Each..... **$129.95**

SR-440 AM-FM TUNER

Audio output controlled by tuner volume control; low impedance cathode follower output. Improved temperature compensated circuits prevent oscillator drift on both AM and FM. Oscillator shielding meets FCC and EIA specifications for minimum radiation. **Tuning Range:** FM, 88 to 108 mc; AM, 540 to 1600 kc. **IF Band Width:** FM, 200 kc; AM, 15 kc broad, 8 kc sharp position. **Frequency Response:** FM, 20 to 20,000 cycles. AM, 20 to 7,000 cycles broad position. **Sensitivity:** On 72 ohm matched antenna input, .9 μv for 20 db quieting. On 300 ohm antenna input, 1.8 μv for 20 db quieting. **Antenna Connectors:** FM, terminals for 300 ohm input. AM, terminals for high impedance antenna. **Controls:** AM-FM Selector Switch; AFC Switch; Local-Distant Switch for both AM and FM. Broad-Sharp Switch for AM; Tuning Control; Gain Control. **Tubes:** 3-6BA6, 1-6BE6, 1-6BQ7A, 1-6BZ7, 2-6AL5, 1-12AU7, 1-6FG6/EM84, 1-6X4. **Size:** 13½" w. x 9⅝" d. x 4⅝" h.
Stromberg-Carlson Model SR-440 AM-FM Tuner—Gold and white trim. Less top cover. Net.. **$159.95**

PR-499 "PERFECTEMPO" TURNTABLE

Specifications listed show maximum tolerances for this unit; delivered turntables will have superior specifications. **Speeds:** Constantly variable from 14 to 80 rpm; guaranteed constant at any setting. **Wow:** Less than 0.25% peak; 0.14% rms. **Flutter:** 0.1% peak; 0.09% rms. **Noise Level:** −55 db. **Motor and Drive:** Four-pole motor suspended beneath mounting plate for hum-free isolation; elastic belt drive is rumble free; cone drive on idler wheel provides torque for driving pressure. **Features:** Stroboscopic window pilot light indicates speed. Cutout for 45 rpm records eliminates special adapters. Morocco red deck with aluminum trim comes on legs; needs no base. **$99.95**
Stromberg-Carlson Model PR-499 Turntable—Net Each.................

PR-488 AUTOSPEED CHANGER

Speeds: 78, 33⅓, 45 and 16⅔ rpm. **Automatic-Manual Operation:** Automatic intermix of LP (45 or 33⅓ rpm) records regardless of size or sqeuence; automatic 78 rpm play when stylus in 78 position. **Motor and Drive:** Idler disengage in "off" position to prevent flat spots; four-pole motor with muting switch. Turntable comes to stop during cycle change; prevents damage to dropping records. **Tone Arm:** Acoustically isolated, perfectly balanced for trouble-free performance; can be handled at any time without damage. **Size:** 13½" w. x 12" d x 3" below and 5" above mounting board.
Stromberg-Carlson Model PR-488SRD—With stereo diamond cartridge. Net. **$94.95**
Stromberg-Carlson Model PR-488X—Less cartridge; wired for stereo. Net.... **$64.95**

PR-500 SINGLE SPEED MANUAL TURNTABLE WITH TONE ARM

For stereo and monophonic operation. **Motor:** Two hysteresis-synchronous motors with automatic speed compensation device. **Rumble and Noise:** Virtually eliminated. **Size:** 14¾" w. x 14¾" d. (including arm overhang), 2⅞" above and 2$\frac{3}{16}$" below mounting plate.
Stromberg-Carlson Model PR-500 Single Speed Manual Turntable and Tone Arm—Complete with AC plug and two shielded pin plug leads. Net Each.... **$69.95**

RA-498 STEREO TONE ARM

Resonance as low as 12 cycles; flat response below the limits of audibility. Tracks accurately down to ½ gram; will not resonate with any cartridge. Adjustable calibrated counterweight provides any needle point force. Snap-in phenolic resin fiber cartridge mount fits into four spring loaded contacts in the shell. Cartridge changes made in seconds. Front mounted finger hook. Fast, precise mass centering device keeps stylus at an exact right angle for true tracking of each channel.
Stromberg-Carlson Model RA-498 Stereo Tone Arm—Complete with mounting base, viscous fluid, rest, and cartridge clip. Net Each.................. **$24.95**

ACCESSORIES

S-C No.	Description	Net Each
AC-445-V	Vinyl-clad top cover for SR-445*	**$12.95**
AC-445-P	Painted top cover for SR-445†	**8.95**
AC-440-P	Painted top cover for SR-440†	**8.95**
AC-441/3-V	Vinyl-clad top cover for AM-441, AM-442, FM-443*	**10.95**
AC-441/3-P	Painted top cover for AM-441. AM-442, FM-443†	**8.95**
PB-497-W, M, C	Base for PR-499 (M—Mahogany, W—Walnut, C—Cherry)	**19.95**
PB-487	Base for PR-488 changer	**5.95**
CA-441/3	Adapter kit for mounting AM-442 or FM-443 tuners	**4.95**
CA-445A	Adapter kit for mounting SR-440 or SR-445 AM-FM tuners	**3.95**

*In white, black, tan or red. †In red only.

675-59A

FOR INTEGRITY IN MUSIC

"There is nothing finer than a Stromberg-Carlson"

ASR-333 24-WATT STEREO AMPLIFIER

Provision for three-channel stereo through use of the "Phantom" (A and B) output. **Power Output:** 24 watts (two 12-watt channels); peak, 48 watts. **Frequency Response:** ±1 db, 20-20,000 cps. **Distortion:** IM, less than 1% level (60 and 7,000 cps at 4:1 ratio); harmonic, less than 1% at full output. **Hum and Noise:** 63 db down. **Sensitivity:** Ceramic phono, 100 mv; tuner, 300 mv; tape, 300 mv; aux, 300 mv. **Inputs:** Ceramic phono, tuner, tape head and tape-aux. **Outputs:** 4, 8, 16 ohms. **Controls:** Bass (each channel, 15 db droop, 15 db boost); Treble (each channel, 14 db droop, 12 db boost); Gain (each channel); Master Loudness (continuously variable), Program Selector (Phono BA, AB; Tuner; Tape-Aux); Power On-Off Switch (separate); Stereo-Monophonic Switch. One switched AC outlet. **Tubes:** 8, plus 2 silicon rectifiers. **Size:** 14⅜" w. x 13⅝" d. x 5" h. Black and brushed chrome finish. U/L Approved.
Stromberg-Carlson Model ASR-333 Stereo Amplifier—Net Each........... **$99.95**

ASR-333

ASR-433 24-WATT STEREO AMPLIFIER

Provision for three-channel stereo through use of the "Phantom" (A and B) output. **Power Output:** 24 watts (two 12-watt channels). **Frequency Response:** ±1 db, 20-20,000 cps. **Harmonic Distortion:** Less than 1%. **Noise Level:** 63 db down. **Inputs:** Magnetic phono, ceramic phono, tape head, tuner, aux and tape. **Outputs:** 4, 8, 16 ohms and dual tape. **Controls:** Loudness (In-Out, Continuously Variable); Bass; Treble; Master Volume; Volume; Equalization (RIAA Mag. Phono, NAB Tape Head); Channel Selector (Channel A, Channel B, Stereo, Monophonic, Crossover); Program Selector (Tape Head, Tuner, Phono, Aux); Power On-Off Switch. One switched AC outlet. **Tubes:** 10, plus 2 silicon rectifiers. **Size:** 13½" w. x 13⅜" d. x 4⅝" h. U/L Approved.
Stromberg-Carlson Model ASR-433 Stereo Amplifier—Gold and white or black and brushed chrome (specify). Less top cover. Net Each........... **$129.95**

ASR-433

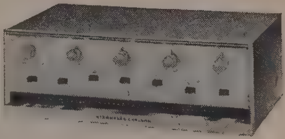
ASR-444 60-WATT STEREO AMPLIFIER

Provision for three-channel stereo through use of the "Phantom" (A and B) output. **Power Output:** 60 watts (two 30-watt channels); peak, 120 watts. **Frequency Response:** ±.9 db, 20-20,000 cps. **Distortion:** IM, less than 1% program level (60 and 7,000 cps at 4:1 ratio); harmonic, less than .7% at full output. **Hum and Noise:** 70 db down. **Sensitivity:** Magnetic phono, 3 mv; ceramic phono, 300 mv; tape head, 2.5 mv; tuner, 300 mv; tape, 300 mv; aux, 300 mv. **Inputs:** Magnetic phono, ceramic phono, tape head, tuner, tape and aux tape. **Outputs:** 4, 8, 16 ohms. **Controls:** Loudness (In-Out, Continuously Variable); Bass (each channel, 15 db droop, 15 db boost); Treble (each channel, 14 db droop, 12 db boost); Volume (each channel); Master Gain; Equalization (RIAA Phono, NAB Tape); Channel Selector (Channel A, Channel B, Stereo, Monophonic Crossover); Program Selector (Tape Head, Tuner, Phono, Aux); Channel Reverse; AC Power On-Off Switch; Output Balance Signal On-Off Switch. Two AC outlets, one switched. **Tubes:** 10, plus 2 silicon rectifiers. **Size:** 13½" w. x 13⅜" d. x 4⅝" h. U/L Approved.
Stromberg-Carlson Model ASR-444 Stereo Amplifier—Gold and white or black and brushed chrome finish (specify). Less top cover. Net Each....... **$169.95**

ASR-444

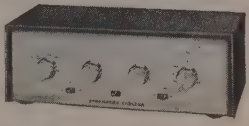
ASE-434 STEREO PREAMPLIFIER

Provision for three-channel stereo through use of the "Phantom" (A and B) output. **Frequency Response:** ±1 db at 1 v., 10-100,000 cps. **Distortion:** IM, .5% at full output (60 and 7,000 cps at 4:1 ratio); harmonic, .3% 20-20,000 cps at full output. **Hum and Noise:** 70 db down. **Sensitivity:** Magnetic phono, 3 mv; ceramic phono, 500 mv; tape head, 2.5 mv; tuner, 450 mv; tape, 500 mv; aux, 450 mv. **Inputs:** Magnetic phono, ceramic phono, tape head, tuner, tape, aux. **Output:** Dual tape out. **Controls:** Program Selector (Magnetic Phono, Tape Head, Tuner-Aux, Ceramic Phono, Tape); Treble; Bass; Gain (may be switched to loudness controls); Channel Selector (Channel A, Channel B, Stereo, Stereo Reverse, Monophonic); Equalization (RIAA phono, NAB tape); Scratch Filter; Rumble Filter; Loudness; Output Balance Signal; AC Power On-Off Switch. Three AC outlets, two switched. **Tubes:** 6, plus 2 silicon rectifiers. **Size:** 13½" w. x 8½" d. x 4⅝" h. Gold and white finish. U/L Approved.
Stromberg-Carlson Model ASE-434 Stereo Preamplifier—Less top cover. Net. **$99.95**


ASE-434

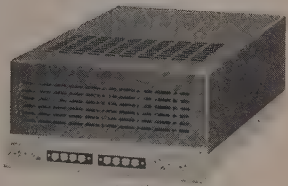
AR-430 12-WATT CONTROL AMPLIFIER

Power Output: 12 watts. **Frequency Response:** 20-20,000 cycles, ±1 db. **Harmonic Distortion:** Less than 1.5%. **Noise Level:** 63 db down. **Inputs:** Magnetic phono, ceramic phono, tape, tuner and aux. **Outputs:** 8 ohms. **Controls:** Loudness; Bass; Treble; Equalization (RIAA Mag. Phono., NAB Tape Head); Selector (Phono Tape Head, Tuner, Tape and Aux.); Volume; Power On-Off Switch. **Tubes:** 1-7025/12AX7, 1-6AV6, 2-6BQ5/EL84, 1-6CA4/EZ81. **Size:** 12" w. x 5½" d. x 4⅛" h.
Stromberg-Carlson Model AR-430 Control Amplifier—Net Each........... **$59.95**


AR-430

ASP-422 40-WATT STEREO POWER AMPLIFIER

Provision for three-channel stereo through use of the "Phantom" (A and B) output. **Power Output:** 40 watts (two 20-watt channels). **Frequency Response:** ±1 db, 20-50,000 cps. **Distortion:** IM, less than 1% program level (60 and 7,000 cps at 4:1 ratio); harmonic, less than 1% at full output. **Hum and Noise:** 80 db down. **Input:** One, with variable input sensitivity from 1 to 10 v. **Outputs:** 4, 8, 16. **Controls:** Gain (variable, separate for each channel). Two AC outlets. **Tubes:** 4, plus 2 silicon rectifiers. **Size:** 10¾" w. x 9¼" d. x 5" h. U/L Approved.
Stromberg-Carlson Model ASP-422 Stereo Power Amplifier—Net Each...... **$99.95**


ASP-422

AP-437 40-WATT POWER AMPLIFIER

Power Output: 40 watts. **Frequency Response:** 20-20,000 cycles, ±.1 db at 40 watts; 10-60,000 cycles, ±1 db at 40 watts; 10-100,000 cycles, ±1 db at 10 watts. **Distortion:** .4% at 40 w. (60 and 7,000 cps at 4:1 ratio), IM; .1% 100-10,000 cps at 40 watts, .5% 20-20,000 cycles at 40 watts, harmonic. **Noise Level:** 90 db down. **Input:** One with variable input sensitivity from .7 to 10 v. **Outputs:** 4, 8, 16 ohms. **Controls:** Hum; Balance; Bias; Speaker Selector Switch; Power On-Off Switch. Two AC outlets, one switched. **Tubes:** 4, plus 1 rectifier. **Size:** 10½" w. x 10" d. x 6½" h. U/L Approved.
Stromberg-Carlson Model AP-437 Power Amplifier—Net Each............ **$145.00**

AP-437

ACCESSORIES

S-C No.	Description	Net Each
AC-333-V*	Vinyl-clad top cover for ASR-333	**$12.95**
AC-333-P†	Painted top cover for ASR-333	**8.95**
AC-432-V*	Vinyl-clad top cover for ASR-433 and ASR-444	**12.95**
AC-432-P†	Painted top cover for ASR-433 and ASR-444	**8.95**
AC-434-P†	Painted top cover for ASE-434	**8.95**
CA-432	Escutcheon adapter for mounting ASR-433, ASR-444, ASE-434, SR-440 and SR-445	**1.95**
CA-418	Adapter for mounting components in EH-418 component cabinets	**1.95**

*In white, black, tan or red. †In red only.

ALTEC® Stereo, Hi-Fi Equipment

LANSING CORPORATION

445A STEREO PREAMPLIFIER

The ultimate in stereo control, provides every possible facility for proper stereo reproduction. **Features:** Self-contained power supply; a total of 12 inputs; spatial orientation control for precise channel balance for stereo effects; concentric mounted bass and treble controls operate each channel individually or together; designed for use with Altec Lansing 345A stereo amplifier or similarly high quality units. **Frequency Response:** 20-22,000 cps. **Noise Level:** −80 db high level, −59 db tape deck, −64 db phono and −73 db mike inputs at full output (3 v.). **Inputs:** 3 high level and 3 low level pairs for single or stereo pickups, tape heads or mikes. **Outputs:** 1 main audio, 1 recorder for each channel; 3 AC outlets. **Controls:** 7 Pushbutton Input Selectors and Power Switch; Bass; Treble; Contour/Volume; Spatial Orientation; Output Selector (Left, Right, Standard and Reverse). **Tubes:** 1-12AY7, 1-12AU7. **Transistors:** 4-2N168A. **Size:** 14⅝″ w. x 5$\frac{15}{16}$″ h. x 8$\frac{13}{16}$″ d., including cabinet. Weight, 6¾ lbs.
Altec Lansing Model 445A—Chassis only. Net Each. **$189.00**

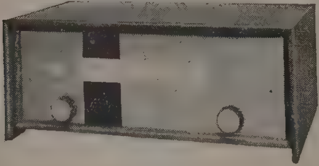
MODEL S41 STEREO CONTROL

Ingenious master gain control for stereo operation with any model 440 preamps or with 340, 341 or 350 power amplifiers in any combination. Simple plug-in design suited particularly to 80 watt stereo systems.
Altec Lansing Model S41—Net Each................ **$24.00**

345A STEREO POWER AMPLIFIER

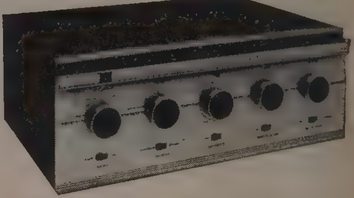
Dual channel power amplifier in one compact unit delivers up to 200 watts peak power output. Unique switching facilities permit up to 9 possible output combinations for speaker versatility. Ingenious automatic impedance matching device assures speaker match at all times. Two convenience AC outlets. **Power Output:** 60 watts rms each channel; 200 watts total peak. **Frequency Response:** ±1 db, 10-100,000 cps. **Harmonic Distortion:** Less than 0.5% total, at 40 watts, 40-15,000 cps. **Gain:** 66 db. **Noise Level:** −40 dbm; 85 db below full output. **Controls:** Individual Channel Volume Controls; 3-position Input Selector; 3-position Output Selector; AC Power Switch. **Tubes:** 2-6AU6, 2-6C4, 4-6CA7, 2-5U4GB. **Power Required:** 240 watts, 117 v. AC, 60 cps. **Size:** 16½″ w. x 12½″ d. x 6½″ h. Weight, 38 lbs.
Altec Lansing Model 345A—Net Each............ **$270.00**

307A FM TUNER



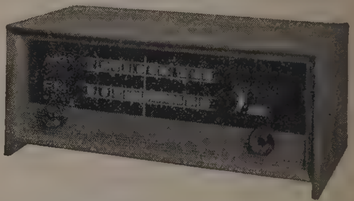
A new approach to top FM performance; provides such great sensitivity that a simple 2 or 3 ft. wire is sufficient antenna except in the most remote locations. **Features:** Broad tuning and signal-seeking AFC for exceptional accuracy in tuning without visual aids. Three IF stages provide strong cross-modulation rejection. Germanium detector circuit reduces distortion, eliminates noise. Squelch circuit allows 20 db quieting between stations. Output supplied for FM Multiplex. **Sensitivity:** 1.5 μv max.; 2.5 μv for 20 db quieting; 5.0 μv for 30 db quieting. **Frequency Response:** ±2 db, 20-20,000 cps. **Distortion:** Less than 2% at 100% modulation and at 1 volt output. **Controls:** Tuning; On-Off; AFC; FM. **Antenna:** Standard 300 ohms. **Tubes:** 2-6AU6, 1-6DT8, 1-6U8. **Power Required:** 20 watts, 117 v. AC, 60 cps. **Size:** 13¾″ w. x 4¼″ h. x 5⅞″ d. Shipping Weight, 9 lbs.
Altec Lansing Model 307A—Chassis only. Net Each... **$99.00**

353A STEREO PREAMP-AMPLIFIER



Versatile preamplifier-amplifier featuring a Matricing network for third-channel stereophonic sound. **Power Output:** 50 watts rms continuous, stereophonic or monophonic. 100 watts peak stereophonic program power. **Frequency Response:** 20-20,000 cps ±1.0 db at 25 watts; 10-30,000 cps ±0.5 db at 1 watt. **Distortion:** Less than 1% THD at 25 watts, 1,000 cps, each channel; less than 1% THD at 20 watts, 30-15,000 cps, each channel. **Noise Level:** (At 20 watts output) Radio, tape machine, multiplex, 82 db below; magnetic phono, tape head, 50 db below; ceramic phono, mike, 56 db below. **Inputs:** (14) Stereophonic or monophonic: Magnetic Phono; Ceramic Phono; Tape Head; Tape Machine; Radio; Mike; and Multiplex. **Outputs:** (6) Stereophonic or monophonic: Channel A and Channel B Recorder; Left and Right Speaker; Center Channel Speaker; Auxiliary Speaker, plus two AC outlets. **Controls:** Input Selector; Channel Balance; Dual Gain; Dual Bass; Dual Treble; Stereophonic two-channel, three-channel; Stereophonic standard-reverse; Stereophonic-Monophonic; Rumble Filter; Loudness Contour. **Sensitivity:** For 20 watts, 1000 cps. Radio, tape machine, multiplex, 230 mv; magnetic phono, 2 mv; ceramic phono, 150 mv; microphone, 2.5 mv; tape head, 3.0 mv. **Load Impedance:** 8 and 16 ohms. **Damping Factor:** 4. **Tubes:** 5-12AX7, 4-6L6GC. **Power Required:** 165 watts, 117 v. AC, 60 cps. **Size:** 15″ w. x 11¼″ d. x 5⅞″ h. Weight, 35 lbs. (approx.).
Altec Lansing Model 353A Stereo Preamp-Amplifier —Specify platinum pink or platinum gold panel. Net **$199.50**

306A AM-FM BROADCAST TUNER



Requires control amplifier such as Models 440C or 344A. **Controls:** Tuning; On-Off/AM/FM/FM-AFC. **Maximum Sensitivity:** FM, 1.1 μv; AM, 3 μv. **Quieting Sensitivity:** FM, 2.5 μv/20 db, 4μv/30 db. **Selectivity:** FM, 6 db bandwidth 185 kc, 20 db 300 kc; AM, 6 db bandwidth 11 kc, 40 db 27 kc. **Frequency Response:** 20-20,000 cps, ±0.5 db. **Image Rejection:** FM, 48 db; AM, 66.5 db. **Distortion:** FM, less than 1% at 100% modulation, less than 0.4% at 1 v. output; AM, less than 1.5% at 30% modulation. Standard 300 ohm FM antenna; built-in ferrite rod "loopstick" AM antenna, plus external antenna connectors. 1 volt cathode follower output matched for Models 440C and 344A. **Tubes:** 2-6BQ7A, 1-6AB4, 1-6BA6, 1-6AU6, 1-6AL5, 1-6BE6, 1-12AU7. **Power:** 65 watts, 117 v., 60 cps. **Size:** 14⅝″ w. x 8$\frac{13}{16}$″ d. x 5$\frac{15}{16}$″ h., including cabinet. Shipping Weight, 15 lbs.
Altec Lansing Model 306A—Chassis only. Net Each. **$199.50**

350A BASIC AMPLIFIER

Designed for the purist with the sole purpose of providing the best possible final stage power amplification. Its components are the finest available, selected for capacity far in excess of the demands of the circuit. Gold plated grids, designed specifically for audio use, have 100-watt capacity. Handy, 70-volt output is provided for multiple speaker installations; and, an accessory input line-matching transformer is available for adapting the unit for use with professional mixing and recording equipment. **Power Output:** 40 watts at less than 0.5% harmonic distortion. **Frequency Response:** ±1 db, 5-100,000 cps. **Gain:** 66.5 db from 50,000 ohm generator. **Noise Level:** −40 dbm below full output. **Damping Factor:** Continuously adjustable 7 to .13 on 8 and 16-ohm taps. **Output Impedance:** Continuously adjustable .14 to 7.5 times nominal load on 8 and 16-ohm taps; less than 10% of nominal load on 70 v. tap. **Controls:** On-Off; Master Gain; Output Impedance or Damping. Convenience 117 v. AC receptacle provided. **Tubes:** 1-12AY7, 1-12AU7, 2-6550, 1-5U4GB, 1-OA3/VR75. **Power Required:** 160 watts, 117 v. AC, 60 cps. **Size:** 7″ h. x 9⅝″ w. x 13¼″ d. Dark green hammertone finish. Wt., 27 lbs.
Altec Lansing Model 350A Amplifier—Net Each..... **$171.00**

WOOD AND METAL CABINETS

Altec Lansing Model 12542 Wood Cabinet—Fits Models 445A, 307A and 306A. Specify walnut, blond or mahogany finish. Net Each **$19.95**

Altec Lansing Model 13094 Metal Cabinet—Fits Models 445A, 307A and 306A. Net Each............................**$8.00**

LEAK Stereo, Hi-Fi Components

NEW "TROUGH LINE II" FM TUNER

Uncomprising quality and superior workmanship make this fine FM tuner the ideal companion for Leak's advanced-design, "Point One Stereo" preamplifier. Unique, modern styling blends into any decor by use of interchangeable front panels for color harmony. Its beauty is matched only by its fine performance. Special features include: Automatic frequency control for drift-free tuning; tuning eye makes exact, on-station selection easy; cathode follower output assures negligible high frequency attenuation. Output provided for FM Multiplex adaptation. **Sensitivity:** 1.5 µv for 20 db quieting. **Controls:** On-Off; AFC On-Off; Tuning; Sensitivity Local-Distant. **Outputs:** Cathode follower audio and FM Multiplex. **Power Required:** 50 watts, 110-125 v. AC, 50/60 cps. **Tubes:** 9 plus EM84 tuning indicator and EZ80 rectifier. **Size:** 11½" w. x 7¾" d. x 4½" h.

Leak Model "Trough Line II" FM Tuner—Net Each... $\$129^{00}$

Leak Model TW (Walnut), **TM** (Mahogany) or **TB** (Blond) **Cabinet**—For above. Net Each.......................**$9.95**

"POINT ONE STEREO" PREAMPLIFIER

Compact stereo preamp, designed for the discriminating audiophile. Has provisions for every conceivable stereo application. Features the functions of two preamps with ganged bass, treble and volume controls, plus rumble filter and speaker balance controls. High sensitivity to match Leak monophonic or stereophonic power amplifiers. **Controls:** Function (Stereo, Stereo Reverse, Left Input to both channels, Right input to both channels, Stereo converted to Monophonic); dual-ganged Bass; dual-ganged Treble; dual-ganged Volume/On-Off; dual-ganged Balance; Rumble Filter; Input Selector (stereo and monophonic NAB Tape, RIAA Phono, Tuner, Mike and "Extra"). **Harmonic Distortion:** Less than 0.1% for 125 mv output. **Input Sensitivity:** 4.5 mv, tape heads; 5.5 mv; RIAA phono; 50 mv, Tuner; 3 mv, mike; 50 mv, "extra". **Outputs:** Tape Recorder (stereo or monophonic) and Amplifier. **Other Features:** Newly designed front panel has interchangeable front panel to match room decoration changes. **Tubes:** 4-EF86. **Size:** 11½" w. x 5" d. x 4½" h. Weight, 8 lbs.

Leak Model "Point One Stereo" Preamplifier—Net.. $\$109^{50}$

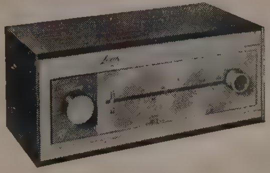
Leak Model PW (Walnut), **PM** (Mahogany) or **PB** (Blond) **Cabinet**—For above. Net Each.......................**$9.95**

"VARISLOPE III" MONOPHONIC PREAMPLIFIER

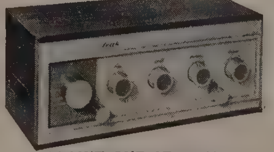
Designed for the highest fidelity and most flexible control system. Low noise, low distortion, 2-stage feedback circuitry powered from Leak amplifier. **Harmonic Distortion:** Less than 0.01% for 125 mv output (loads any Leak amplifier). **Hum and Noise:** Approx. 66 db below full power output, tape or radio; 60 db on other inputs. **Controls:** Input Selector (Pickup 1, Pickup 2, RIAA, NAB, LP, 78 Old Eur., Tuner, Tape); Bass, ±16 db; Treble, ±18 db; Volume; High Filter; High Slope; Rumble Filter. **Inputs:** Tape replay, tuner, 2 pickups; power from amplifier. **Outputs:** Tape record, and amplifier. **Other Features:** Filter control assists adjustment of high frequencies. Slope control varies rate of attenuation above turnover frequency between 5 and 35 db per octave. Preset controls provided for adjustment of input signals from tuner and pickups. Pickups selectable with 2-way switch; accommodate any pickup made. **Size:** 11½" w. x 5" d. x 4 7/16" h. Weight, 5 lbs.

Leak Model "Varislope III" Preamplifier—Net Each....... $\$79^{00}$

Leak Model PW (Walnut), **PM** (Mahogany) or **PB** (Blond) **Cabinet**—For above. Net Each.......................**$9.95**

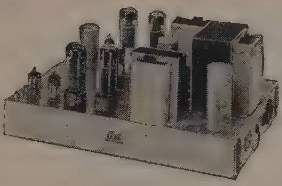


"TROUGH LINE II"

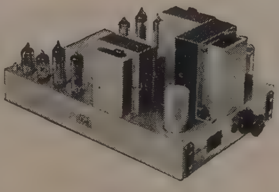


"POINT ONE STEREO"

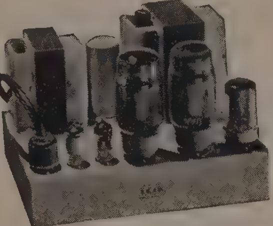
"VARISLOPE III"



"STEREO 50"



"STEREO 20"



"TL/25 PLUS"

DYNAMIC PICKUP, ARM

"STEREO 50" POWER AMPLIFIER

The ultimate in dual channel amplifiers, adhering to the Leak standards of craftsmanship, provides high power with low distortion. Each channel is identical in gain within 0.5 db. Specifications listed are for each channel. **Power Output:** 25 watts rms each channel. **Frequency Response:** ±0.5 db, 20-20,000 cps. **Harmonic Distortion:** 0.1% for 20 watts output, ±1 db at 1 kc. **Hum and Noise:** 80 db, ±3 db below 20 watts. **Damping Factor:** 23 measured at 1 kc. **Output Impedance:** 3 to 20 ohms, selectable. **Tubes:** 4-KT66, 3-ECC83, 1-GZ34 or equivalents. **Power Required:** 100-125 v. AC, 50-100 cps. **Size:** 13⅛" w. x 10⅝" d. x 6⅞" h. Weight, 31 lbs.

Leak Model "Stereo 50" Amplifier—Net Each....... $\$189^{00}$

"STEREO 20" POWER AMPLIFIER

Ideal amplifier for stereo installation in the average-sized room; designed with broadcast and professional quality construction for performance that is second only to the "Stereo 50". Each channel is identical in gain within 0.5 db. **Power Output:** 14 watts for each channel. **Frequency Response:** ±0.5 db, 20-20,000 cps. **Harmonic Distortion:** 0.1% for 10 watts output. **Hum and Noise:** 80 db, ±3 db below 10 watts. **Damping Factor:** 25 measured at 1 kc. **Output Impedance:** 3 to 20 ohms, selectable. **Tubes:** 4-EL84, 2-ECC81, 1-ECC83, 1-GZ34 or equivalents. **Power Required:** 100-125 v. AC, 50-100 cps. **Size:** 12¼" w. x 10½" d. x 7 1/16" h. Weight, 27 lbs.

Leak Model "Stereo 20" Amplifier—Net Each....... $\$149^{00}$

"TL/50 PLUS" AMPLIFIER (NOT ILLUS.)

Full 50 watts output using KT88 tubes for power and exceptional performance. **Frequency Response:** ±0.5 db, 20-20,000 cps. **Harmonic Distortion:** 0.1% for 50 watts, ±1 db at 1 kc. **Hum and Noise:** 86 db ±3 db below 50 watts with input of 25,000 ohms. **Power Output:** 50 watts rms. **Sensitivity:** Input of 125 mv at 1 kc gives 50 watts output. **Outputs:** 3-20 ohms adjustable; 3 tappings nominally 16, 8, and 4 ohms. Two AC outlets. **Power Required:** 100-125 v. AC, 50-100 cps with fused voltage selector plug. **Size:** 11½" w. x 9" d. x 6⅜" h. Mounting brackets and screws supplied. Weight, 28 lbs.

Leak Model "TL/50 Plus" Amplifier—Net Each....... $\$149^{00}$

"TL/25 PLUS" AMPLIFIER

Outstanding 25-watt unit. Triple loop, 3-stage, feedback circuit uses KT66 (EL34) tetrodes in push-pull. **Frequency Response:** ±0.5 db, 20-20,000 cps. **Harmonic Distortion:** 0.1% for 25 watts, ±1 db at 1 kc. **Hum and Noise:** 86 db ±3 db below 25 watts with input of 25,000 ohms. **Power Output:** 32 watts rms, max. **Outputs:** 3-20 ohms; adjustable plug selects 3 tappings, nominally 16, 8, and 4 ohms. Two AC outlets. **Power Required:** 100-125 v. AC, 50-100 cps with fused voltage selector plug. **Size:** 10" w. x 7⅞" d. x 6 11/16" h. Mounting brackets and screws supplied. Weight, 17 lbs., 6 oz.

Leak Model "TL/25 Plus" Amplifier—Net Each....... $\$109^{50}$

"TL/12 PLUS" AMPLIFIER

Top performance at a low cost; perfect for the average room. Appearance similar to "TL/25 Plus". **Power Output:** 14 watts rms, max. **Frequency Response:** ±0.5 db, 20-20,000 cps. **Harmonic Distortion:** 0.1% at 12 watts output, ±1 db at 1 kc. **Hum and Noise:** 86 db ±3 db below 12 watts with input of 25,000 ohms. **Outputs:** Adjustable 3-20 ohms, nominally 4, 8, and 16 ohms. Two AC outlets. **Power Required:** 100-125 v. AC, 50-100 cps with fused voltage selector plug. **Size:** 10" w. x 7⅞" d. x 5 15/16" h. Mounting brackets and screws supplied. Weight, 14 lbs.

Leak Model "TL/12 Plus" Amplifier—Net Each......... $\$89^{00}$

DYNAMIC PICKUP ARM AND CARTRIDGE

Low inertia, advance design arm keeps friction to a minimum. Plays at from 2 to 6 grams; adjustable by counterweight; provision for interchangeable plug-in heads. Dynamic moving coil pickup is distortion-free; coil impedance approx. 6 ohms at 1000 cps. Shielded step-up transformer delivers 8 mv for each cm/sec. rms recorded velocity. **Frequency Response:** ±1 db, 40-20,000 cps with LP head. **Low Frequency Resonance:** 20 cps (±5 cps). **Size:** 9¼" to pivot, 2" behind pivot; adjustable for height; mounting template provided.

Leak Model A Arm and Pickup—Includes arm, transformer, pickup and diamond stylus for microgroove recordings. Net Each................ $\$59^{00}$

Leak Model B Pickup Only—Less transformer and arm; with diamond stylus for 78 rpm records. Net Each......**$32.50**

PRICES SLIGHTLY HIGHER WEST OF THE ROCKIES.

SHERWOOD Stereo Equipment

MODEL S-2200

MODEL S-5000

MODEL S-4400 MODEL S-360

MODEL S-2200 FM-AM MULTIPLEX STEREO TUNER

Fulfills today's stereo broadcasting requirements. Separate AM and FM sections; FM multiplexing provides for future stereo needs. New "Interchannel Hush" noise-muting system automatically eliminates noisy "hash" between FM channels. Automatic frequency control (AFC) makes FM tuning simple, easy. Front panel controls. Space provided for Plug-In FM multiplex adapter (for specifications and prices see listing on following page); no external equipment required when multiplex is added. Balanced FM input transformer; mixer cathode-injection of FM oscillator. Constant bandwidth system permits uniform 15 kc bandwidth even at low end of band. Ceramic piston-trimmers instead of compression-type; all IF tuning capacitors hermetically sealed mica insulated; all coil tuning cores are sealed. Push button monophonic or stereo selection of FM-AM multiplex indicated by two (FM and AM) light-bar tuning eyes with matching lights to indicate FM Multiplex and stereo operation. **Sensitivity:** FM, 0.95 μv for 20 db quieting; AM, 2 μv at 60% modulation for 0.5 v. output, 6 db S/N. **Selectivity:** FM, 195 kc at −6 db; wide AM, 15 kc at −6 db, narrow AM, 5 kc at −6 db. **FM Discriminator:** 600 kc peak-to-peak. **Tuning Range:** FM, 87.5 to 108.5 mc; AM, 530 to 1650 kc. **Frequency Response:** FM, 20-20,000 cps ±½ db; AM, (wide) 20-7500 cps at −6 db. **FM Distortion:** Less than ⅓% IM at 100% modulation (60/7 kc: 4/1 w/std. preemphasis). Less than ¼% harmonic at 100% modulation, 400 cps. **Hum and Noise Level:** FM, 60 db below 100% mod.; AM, 55 db below 100% mod. **FM Drift:** ±2 kc w/AFC, ±25 kc without AFC. **Antenna:** FM, 300-ohm balanced; AM, directable ferrite rod with external antenna post. **Outputs:** Cathode follower audio, FM multiplex. **Audio Output:** 2.0 volts at 100% FM. **Tuning Indicator:** EM84 light-bar tuning eyes. **Tubes:** 1-6BS8, 1-6AB4, 2-6BA6, 3-6AU6, 1-6BE6, 1-6CN7, 1-6EB8, 1-6BN8, 1-12AZ7, 2-6FG6/EM84, 1-6CA4/EZ81. **Power Required:** 65 watts, 110-120 v., 50-60 cps. **Size:** 14″ w. x 12½″ d. x 4″ h. Shipping Weight, 20 lbs.

Model S-2200S—Chassis, less case. Net Each....... $\$179^{50}$
West Coast: **$182.50**

Model S-2200A (Brown), or **S-2200B** (Black)—In Flextone case. Net Each.......................... $\$184^{50}$
West Coast: **$187.50**

Model S-2200C—Gold-tooled "Classic" mahogany leatherette case. Net Each.......................... $\$189^{50}$
West Coast: **$192.50**

Model S-2200J (Black), **S-2200T** (Tan), or **S-2200W** (White)—Gold-tooled "Contemporary" leatherette case. Net Each.. $\$194^{50}$
West Coast: **$197.50**

MODEL S-5000 STEREO AMPLIFIER-PREAMP

Offers every control feature essential to both monophonic and stereo operation by the use of only one set of co-ordinated controls. Chassis matches front panel size and style of Models S-1000, S-2000 and S-3000. Features operation of a stereo phono cartridge playing a monophonic record with vertical rumble and noise components balanced out. Bass and treble controls have friction type dual knobs to adjust one channel separately from the other or together. **Power Output:** Stereo, 20+20 watts (40+40 watts peak); monophonic, 40 watts (80 watts peak). **Frequency Response:** 20-20,000 cps ±½ db at 20 watts. **IM Distortion:** 1½% at rated output. **Hum and Noise:** Radio input, 80 db below 20 watts, phono input, 60 db below 20 watts (DC filament supply). **Sensitivity:** Radio, 0.20 volt; phono, 2 mv. **Inputs:** Phono (RIAA); tapehead (NAB). Six high-level. Two tape monitor. **Outputs:** 4, 8, and 16 ohms for left and right speakers; two cathode follower recording outputs; third channel output. **Controls:** Selector (Tape, Phono, FM/AM, FM/MX, TV/Aux.); **Funct** (Stereo-Normal, Stereo-Reverse, Monophonic 1, Monophoni Monophonic 1+2), also operates a set of indicator lamps to ide tify selected operation; Normal/Reverse Switch; Loucness-Pow On/Off; In/Out Loudness Switch; Dual/Single Bass; Dual/Sin Treble; Stereo Balance (inverts phase when pulled out); Presen Rumble Filter; Scratch Filter; Phono-Level; Output Tube Ba ance. All controls and switches operate both channels. **Tube** 4-7189, 2-7199, 5-12AX7/ECC83, 1-5AR4/GZ34 and seleniu rectifier. **Power Required:** 110 watts; fused. **Size:** 14″ w. x 13½″ x 4″ h. Shipping Weight, 29 lbs.

Model S-5000S—Chassis, less case. Net Each....... $\$189^{50}$
West Coast: **$192.50**

Model S-5000A (Brown) or **S-5000B** (Black)—In Flextone case. Net Each.......................... $\$194^{50}$
West Coast: **$197.50**

Model S-5000C—Gold-tooled "Classic" mahogany leatherette case. Net Each.......................... $\$199^{50}$
West Coast: **$202.50**

Model S-5000J (Black), **S-5000T** (Tan), or **S-5000W** (White)—Gold-tooled "Contemporary" leatherette case. Net Each.. $\$204^{50}$
West Coast: **$207.50**

MODEL S-4400 STEREO PREAMP-AMPLIFIER

Identical to Model S-5000 in appearance and performance, except it has only one basic power amplifier. Ideal for add-on stereo, providing complete control for the whole system and an additional channel of amplification. Use with Model S-360 as 36+36 watt stereo amplifier. Specifications similar to Model S-5000 except power output is 36 watts (72 watts peak) at 1½% IM distortion. **Outputs:** 4, 8 and 16 ohms, recording out, 2nd channel amplifier out. **Tubes:** 4-7189, 1-7199, 3-12AX7/ECC83, 1-12DW7, 1-12AU7, 1-5AR4/GZ34 and selenium rectifier. **Power Required:** 105 watts. Shipping Weight, 24 lbs.

Model S-4400S—Chassis, less case. Net Each....... $\$159^{50}$
West Coast: **$162.50**

Model S-4400A (Brown) or **S-4400B** (Black)—In Flextone case. Net Each.......................... $\$164^{50}$
West Coast: **$167.50**

Model S-4400C—Gold-tooled "Classic" mahogany leatherette case. Net Each.......................... $\$169^{50}$
West Coast: **$172.50**

Model S-4400J (Black), **S-4400T** (Tan), or **S-4400W** (White)—Gold-tooled "Contemporary" leatherette case. Net Each.. $\$174^{50}$
West Coast: **$177.50**

MODEL S-360 36-WATT BASIC AMPLIFIER

(ILLUSTRATED WITH MODEL S-4400)

Same as Model S-4400 above, except without controls and preamplifier. This single 36-watt basic power amplifier, when connected with a dual preamplifier such as Model S-4400, complete a stereophonic dual amplifier-preamplifier featuring one unifie control panel with 36+36 watt output. **Power Output:** 36 watt **Tubes:** 4-7189, 1-7199, 1-5AR4/GZ34, 1 selenium rectifier. **Size** 13½″ w. x 4¾″ d. x 6″ h. Shipping Weight, 15 lbs.

Model S-360S—Chassis; less cage. Net Each.......... $\$59^{50}$
West Coast: **$62.50**

Model S-360C—Chassis with cage. Net Each..........**$65.50**
West Coast: **68.50**

MODEL SMX FM MULTIPLEX ADAPTERS

For reception of any of the various stereo multiplex programs now broadcast over FM. Matrix circuitry, switching and balance adjustments included for both Crosby Sum/Difference and split-channel systems. Subchannel bandpass will receive transmissions at 27, 41, 50 or 67 kc, with up to 60 kc bandwidth. **Audio Output:** 1 volt. **Frequency Response:** 20 to 20,000 cps, ±1 db. **Subcarrier Sensitivity:** 2 mv. **Hum and Noise:** 60 db below rated output. **Subchannel Bandpass:** 22.5 kc to 120 kc. **Detector Bandwidth:** ±30 kc, linear. **Controls:** Stereo Balance (or Dimension); MX Level; Crosby/Split Circuit Switch; Power Off-On. **Inputs:** FM tuner and MX in. **Outputs:** Channel A, Channel B. **Tubes:** 1-12AU7, 1-12AX7, 1-7199, 1-6BF6; selenium rectifier. **Power Required:** 20 watts, 110-125 v., 50-60 cps. **Size:** 5¾″ w. x 10½″ d. x 4″ h. Shpg. Wt., 8 lbs.

Model SMX-S—Wide-band chassis only, less case..... $\$55^{50}$
West Coast: **$56.50**

Model SMX-A (Brown) or **SMX-B** (Black)—Wide-band chassis in Flextone case. Net Each.............. $\$59^{50}$
West Coast: **$60.50**

Model S2MX-S—26 kc narrow-band chassis, less case. Net Each.. $\$60^{50}$
West Coast: **$61.50**

Model S-2MX-A (Brown) or **S2MX-B** (Black)—26 kc narrow-band chassis in Flextone case. Net Each....... $\$64^{50}$
West Coast: **$65.50**

Model S4MX-S—41 kc narrow-band chassis, less case. Net Each.. $\$60^{50}$
West Coast: **$61.50**

Model S4MX-A (Brown) or **S4MX-B** (Black)—41 kc narrow-band chassis, in Flextone case. Net Each...... $\$64^{50}$
West Coast: **$65.50**

Model S6MX-S—67 kc narrow-band chassis, less case. Net Each.. $\$60^{50}$
West Coast: **$61.50**

Model S6MX-A (Brown) or **S6MX-B** (Black)—67 kc narrow-band chassis in Flextone case. Net Each....... $\$64^{50}$
West Coast: **$65.50**

SHERWOOD High Fidelity Equipment

MODEL S-1000II AMPLIFIER

Williamson-type, direct-coupled split-load phase inverter circuit. **Power Output:** 36 watts (72 watts peak) at ½% harmonic distortion or 1½% IM Distortion (60:7 kc/4:1). **Outputs:** 16, 8 and 4 ohm speaker; c-f recording. **Frequency Response:** 20 cps at 20 kc ± ½ db at 36 watts. **Tone Control Range:** 20 db boost or cut at 15 kc; 16 db boost, 19 db cut at 40 cps. **Rumble Filter:** 27 cps, 18 db rejection; 100 cps less than 1 db down. **Preamp-Equalizer Curves:** LP, AES/RIAA, LONdon, EURopean, NAB tape and flat MICrophone. **Selector Switch** provides choice of five inputs (two with high gain, low-noise preamp, three for high level sources such as tuner, TV or recorder). **"Pivoting" Bass and Treble Controls** for smooth action and freedom from distortion. Modified Baxandall inverse-feedback circuitry plus special tapers. **"Center-Set" Loudness Control** (with Power On-Off switch) automatically boosts bass and treble as loudness is turned down, provides conventional uncompensated action above "12 o'clock" position. Loudness In-Out switch; Tape Monitor switch. **Presence Switch** boosts response at 2500 cps approx. 6 db. **Scratch Filter** attenuates phono response at 12 db/octave above 5 kc. **Phono Level** control in preamp channel. **Hum and Noise:** Radio input 80 db and phono input 60 db below rated output. **Tubes:** (9) 4-6BQ5/EL84, 1-7199, 2-12AX7/ECC83, 1-6AQ6, 1-5AR4/GZ34, pilot light. **Size:** 14″ x 10½″ x 4″ high. Shipping Weight, 24 lbs.

Model S-1000IIS—Chassis; less case, with white panel. Net Each.............................. **$109.50**
West Coast: **$112.50**

Model S-1000IIA (Brown) or **S-1000IIB** (Black)—In Flextone case. Net Each.............................. **$114.50**
West Coast: **$117.50**

Model S-1000IIC—Gold-tooled "Classic" mahogany leatherette case. Net Each.............................. **$119.50**
West Coast: **$122.50**

Model S-1000IIJ (Black), **S-1000IIT** (Tan), or **S-1000IIW** (White)—Gold-tooled "Contemporary" leatherette case. Net Each.............................. **$124.50**
West Coast: **$127.50**

MODEL S-1060 AMPLIFIER-PREAMPLIFIER

Offers the same controls, and has the same appearance as Model S-1000 II. Features low wattage consumption; only 110 watts, fused, due to the excellent combination of 6-7189 p-p parallel output tubes operated by a silicon rectifier power supply. Offers "tube saver" time delay switch in the B supply, DC preamplifier filament supply and output tube balance control. The chassis matches the size and style of Models S-1000, S-2000 and S-3000. **Power Output:** 60 watts (120 watts peak). **Frequency Response:** 20-20,000 cps ± 1½ db at 60 watts. **IM Distortion:** 1½%. **Hum and Noise:** Radio input, 80 db below rated output; phono input, 60 db below rated output (DC filament supply). **Sensitivity:** Radio, 0.18 volt; phono, 1.8 mv. **Inputs:** Phono, tapehead, tape monitor and 3 high-level. **Tubes:** 6-7189, 1-7199, 2-12AX7/ECC83, 1-6AQ6, 6-Silicon rectifier, and pilot light. **Outputs:** 4, 8, 16 ohms and cathode follower recording. **Size:** 14″ w. x 10½″ d. x 4″ h. Shipping Weight, 25 lbs.

Model S-1060S Amplifier Preamplifier—Chassis only. Net Each.............................. **$149.50**
West Coast: **$152.50**

Model S-1060A (Brown) or **S-1060B** (Black)—In Flextone case Net Each.............................. **$154.50**
West Coast: **$157.50**

Model S-1060C—Gold-tooled "Classic" mahogany leatherette case. Net Each.............................. **$159.50**
West Coast: **$162.50**

Model S-1060J (Black), **S-1060T** (Tan), or **S-1060W** (White)—Gold-tooled "Contemporary" leatherette case. Net Each.............................. **$164.50**
West Coast: **$167.50**

MODEL S-2000II AM-FM TUNER

Styled to match Model S-1000 II Amplifier. New "Interchannel Hush" noise-muting system automatically eliminates noisy "hash" between FM channels. Edge-lighted dial. 24-carat gold finished escutcheon, flywheel tuning. **Features:** Balanced FM input transformer, mixer cathode-injection of FM oscillator, constant bandwidth system permits uniform 15 kc bandwidth even at low end of band; ceramic piston-trimmers instead of compression-type; all IF tuning capacitors are hermetically sealed mica insulated, all coil tuning cores are sealed **Sensitivity:** FM, 0.95 μv for 20 db quieting; AM, 2 μv at 60% modulation for 0.5 v. output, 6 db S/N. **Selectivity:** FM, 195 kc at −6 db; wide AM, 15 kc at −6 db; narrow AM, 5 kc at −6 db. **FM Discriminator:** 600 kc peak-to-peak. **Tuning Range:** FM, 87.5 to 108.5 mc; AM, 530 to 1650 kc. **Frequency Response:** FM, 20-20,000 cps ± ½ db; AM, (wide) 20-7500 cps at −6 db. **FM Distortion:** Less than ⅛% IM at 100% modulation (60C/7 kc:4/1 w/standard preemphasis). Less than ¼% harmonic at 100% modulation, 400 cps. **Hum and Noise Level:** FM, 60 db below 100% mod.; AM, 55 db below 100% mod. **FM Drift:** ± 2 kc w/AFC, ± 25 kc without AFC. **Antenna:** FM, 300-ohm balanced; AM, directable ferrite rod with external antenna post. **Outputs:** Cathode follower audio, FM multiplex. **Audio Output:** 2.0 volts at 100% FM. **Tubes:** (12) 6BS8, 6AB4, 2-6BA6, 2-6AU6, 6AL5, 6CN7, 6BE6, 12AZ7, 6EB8, 6V4. **Size:** 14″ x 10½″ x 4″ high. Shipping Weight, 18 lbs.

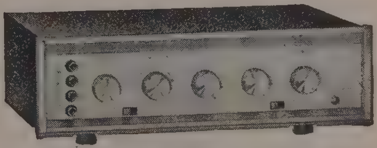
Model S-2000IIS—Chassis; less case; with white front panel. Net Each.............................. **$145.50**
West Coast: **$148.50**

Model S-2000IIA (Brown) or **S-2000IIB** (Black)—In Flextone case. Net Each.............................. **$150.50**
West Coast: **$153.50**

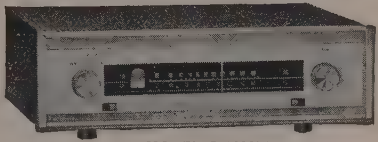
Model S-2000IIC—Mahogany gold-tooled "Chassis" leatherette case. Net Each.............................. **$155.50**
West Coast: **$158.50**

Model S-2000IIJ (Black), **S-2000IIT** (Tan) or **S-2000IIW** (White)—Gold-tooled "Contemporary" leatherette case. Net Each.............................. **$160.50**
West Coast: **$163.50**

MODEL S-1000II



MODEL S-1060



MODEL S-2000II

MODEL S-3000II

MODEL S-3000II FM TUNER

Mate to the S-1000 II amplifier. New "Interchannel Hush" noise-muting system automatically eliminates noisy "hash" between FM channels. **Features:** 0.95 μv sensitivity; cascode balanced input; automatic frequency control; FM multiplex output; "feather-ray" tuning eye; and "local-distant" switch. **Sensitivity:** 0.95 μv makes FM reception practical beyond 100 miles. **Distortion:** Less than ⅓% IM at 100% FM. Foster-Seeley discriminator assures a minimum, even with modulation over 100%. **AFC Control:** Keeps drift to minimum; may be shut off to bring in weak adjacent signals. **Flywheel Tuning:** Precision calibrated dial and "feather-ray" tuning dial make pinpoint tuning easy. Other specifications same as Model S-2000 for its FM portion. **Tubes** (10): 6BS8, 6AB4, 3-6AU6, 6BN8, 12AZ7, 6BR5, 6EB8, 6V4. **Size:** 14″ x 10½″ x 4″. Shipping Weight, 16 lbs.

Model S-3000IIS—Chassis; less case; with white front panel. Net Each.............................. **$105.50**
West Coast: **$108.50**

Model S-3000IIA (Brown) or **S-3000IIB** (Black)—In Flextone case. Net Each.............................. **$110.50**
West Coast: **$113.50**

Model S-3000IIC—Mahogany gold-tooled "Classic" leatherette case. Net Each.............................. **$115.50**
West Coast: **$118.50**

Model S-3000IIJ (Black), **S-3000IIT** (Tan) or **S-3000IIW** (White)—Gold-tooled "Contemporary" leatherette case. Net Each.............................. **$120.50**
West Coast: **$123.50**

PLUG-IN MULTIPLEX ADAPTERS

For use with the Model S-2200 Stereo Tuner, using the S-2200's power supply. Features Crosby/Split circuit switch, and subcarrier operated muting. Electronic specifications similar to those of the SMX Series Multiplex Adapters.

Model AMX—Wide-band chassis only. Net Each..... **$49.50**
West Coast: **$50.50**

Model A2MX—26 kc narrow-band chassis only. Net...**$54.50**
West Coast: **55.50**

Model A4MX—41 kc narrow-band chassis only. Net... **54.50**
West Coast: **55.50**

Model A6MX—67 kc narrow-band chassis only. Net... **54.50**
West Coast: **55.50**

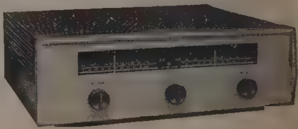
harman kardon Hi-Fi Equipment

A230

"THE BALLAD" MODEL A230 STEREO AMPLIFIER

Dual 15-watt amplifiers complete with preamplifiers in one, handsome unit. Features friction-clutch tone controls that adjust each channel separately; lock automatically for ganged operation when adjusted. Exclusive speaker selector switches permit third channel speaker operation in local or remote stereo systems; simultaneous operation of virtually any combination of speakers, stereo or monophonic, local or remote. Pushbutton on-off switch permits presetting tone and volume levels. Speaker phasing switch corrects for improperly recorded material; subsonic filter stops phono rumble. High quality sound obtained by use of special, grain-oriented, high permeability cores in output transformers. **Power Output:** 15 watts (30 watts peak) each channel with less than 1% harmonic distortion. **Frequency Response:** ±1 db, 15-70,000 cps at normal levels. **Hum:** −80 db at rated output. **Outputs:** 8, 16 ohms and tape, each channel. **Controls:** Dual Treble; Dual Bass; Loudness; Balance; Mode (Stereo Reverse, Normal; Monophonic, Right, Left); Function (Tape Lo/Phono Lo, Phono Hi, Tuner, Aux/Tape Hi); Rumble Filter; Contour; Two Speaker Selector Switches; Pushbutton On-Off. Rear panel controls include two balance pots; two hum controls; speaker phasing switch; speaker impedance switch and phono/tape equalization switches. **Tubes:** 10. **Power Required:** 125 watts; fused. **Finish:** Copper escutcheon with silver gray cage. **Size:** 13 13/16" w. x 11½" d. x 4⅝" h. excluding knobs. Shipping Weight, 18 lbs.

Harman-Kardon Model A230 Ballad—Chassis only. Net Each............**$109.95**
Harman-Kardon Model AC23 Enclosure—Copper and gray. Net Each...... **7.95**


T230

"THE SONNET" MODEL T230 STEREO AM-FM TUNER

Ideal stereo companion for Model A230 amplifier has separate AM and FM sections plus provision for FM Multiplex adaptation. Automatic frequency control locks in station. Features low noise, wideband circuitry for high sensitivity, low distortion. **Sensitivity:** 3.5 μv for 20 db quieting, FM; 80 μv/meter, AM. **Frequency Response:** ±0.75 db, 30-15,000 cps with standard 75 μsec. de-emphasis, FM; ±3 db, 20-7,000 cps, AM. **Distortion:** Less than 0.5% IM at 30% modulation, 3% at 100% modulation, FM; 1% harmonic, AM. **Hum Level:** −60 db at 100% modulation, FM; −45 db at 80% modulation, AM. **Controls:** FM Tuning; Function Selector (Off, FM, FM-AFC, AM, Stereo); AM Tuning. **Outputs:** AM-FM, Monophonic/FM Stereo, AM Stereo and FM Multiplex. **Tubes:** 9 plus 1 diode. **Power Required:** 40 watts. **Finish:** Brushed copper escutcheon, silver gray cage. **Size:** 13 13/16" w. x 12¼" d. x 4⅝" h. excluding knobs. Weight, 13 lbs.

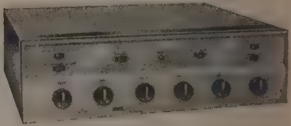
Harman-Kardon Model T230 Sonnet—With enclosure. Net Each..........**$119.95**

TA230

"STEREO FESTIVAL" MODEL TA230 RECEIVER

All stereo know-how in a single, superb instrument. Combines modified version of Model A230 amplifier with modified Model T230 stereo tuner. Performance specifications same as listed for Model A230 and T230 except for the following improvements. Tuner includes tuning bar indicators for each channel. **Sensitivity:** 2.5 μv for 20 db quieting, FM. **Distortion:** Less than 0.6% harmonic, audio. **Frequency Response:** ±1 db, 20-20,000 cps at normal levels. **Additional Controls:** Scratch Filter; Magnetic Inputs (1 and 2); Equalization (RIAA and NAB); Phase Selector. **Tubes:** 20 plus 5 semiconductors. **Power Required:** 175 watts; fused. **Finish:** Specify copper, brass or satin chrome escutcheon; copper and black metal cage or natural wood cabinets. **Size:** 15 13/16" w. x 12¾" d. x 6⅛" h., excluding knobs. Shipping Weight, 35 lbs.

Harman-Kardon Model TA230 Stereo Festival—Chassis only. Net Each....**$259.95**
Harman-Kardon Model AC30 Enclosure—Copper, black metal cage. Net... **12.95**
Harman-Kardon Model WW30 (Walnut) or **FW30** (Fruitwood) **Enclosure**—
Net Each.. **39.95**


A260

"THE CHORALE" MODEL A260 STEREO AMPLIFIER

Creates a new meaning for excellence in hi-fi sound, delivering 60 watts output. Features: Silicon diode power supply for clearly defined low frequency response and superb overload characteristics. Exclusive speaker selector switches permit third channel speaker operation in local or remote stereo systems; simultaneous operation of virtually any combination of speakers, stereo and monophonic, local or remote. Friction-clutch tone controls adjust bass and treble individually on each channel; lock automatically for ganged operation. Tone control defeat switch prevents phase shift for authentic sound. Illuminated pushbutton on-off permits presetting volume and tone. Subsonic filter stops phono rumble. Selector for 4, 8 and 16 ohms impedance provided. **Power Output:** 30 watts (60 watts peak) each channel with less than 0.5% harmonic distortion. **Frequency Response:** ±0.5 db, 15-30,000 cps at 1 watt. **Hum:** −95 db at 30 watts. **Outputs:** 4, 8 and 16 ohms; and tape each channel; third channel amplifier output. **Controls:** Dual Bass; Dual Treble; Rumble Filter; Scratch Filter; Loudness; Balance; Mode (Reverse, Stereo, Monophonic Right, Left); Two Speaker Selectors; Function (Aux-1, Aux-2, Tuner, RIAA Phono, NAB Tape Head); Contour; Pushbutton On-Off; Tone Control Defeat. **Inputs:** Aux-1, Aux-2, Tuner, NAB Tape, RIAA crystal and magnetic phono, each channel. **Tubes:** 10 plus 4 silicon diodes and 2 silicon rectifiers. **Power Required:** 200 watts; fused. **Size:** 15¼" w. x 13⅞" d. x 4⅝" h., less knobs. Shipping Weight, 35 lbs.

Harman-Kardon Model A260 Chorale—Chassis only. Net Each............**$199.95**
Harman-Kardon Model AC60 Enclosure—Copper, bronze and gray. Net.... **12.95**

ST360

"THE MADRIGAL" MODEL ST360 STEREO AM-FM TUNER

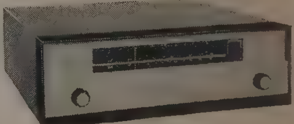
Superb FM section has remarkable sensitivity with superior signal-to-noise ratio and unmeasurable distortion and drift. High response AM section has improved spurious response rejection; noise filter for long distance reception. Separate bar tuning indicators for each channel; indexing scale to note your favorite stations. Inside chassis multiplex adaptation by adding Model MA350. Pushbutton convenience. **Sensitivity:** 0.95 μv for 20 db quieting, FM; 20 μv/meter, AM. **Frequency Response:** ±0.5 db, 20-20,000 cps plus standard 75 μsec de-emphasis, FM; ±3 db, 20-10,000 cps, AM. **Distortion:** Less than 0.1% IM at 30% modulation, 0.5% at 100% modulation, FM; 0.8% harmonic, AM. **Hum Level:** −60 db, FM, −55 db, AM at 100% modulation. **Outputs:** Two low-Z cathode followers. **Controls:** AM Tuning; FM Tuning; Pushbuttons for AM Noise Filter, AM, Stereo AM-FM, Stereo Multiplex, FM, FM-AFC and Power Off. **Tubes:** 16. **Power Required:** 45 watts. **Size:** 15¼" w. x 12¾" d. x 4¾" h. Weight, 26 lbs.

Harman-Kardon Model ST360 Madrigal—Chassis only.
Net Each..**$199.95**
Harman-Kardon Model CX60 Enclosure—Copper and black. Net Each.................................... **12.50**

MODEL MA350 STEREO MULTIPLEX ADAPTER

Plug-in stereo adapter for Models ST360 and F250 tuners for reception of Crosby compatible FM stereo broadcasts. Plugs into space provided in chassis of tuner. Incorporates dimension control to adjust amount of channel separation; when installed control is finger-tip unit just below tuner escutcheon. **Output Level:** 1 volt. **Input Level:** 30 mv. **Distortion:** 1% total harmonic. **Noise Level:** −60 db. **Frequency Response:** ±1 db, 30-15,000 cps. **Tubes:** 3 plus 2 diodes. **Power:** Supplied by tuner.

Harman-Kardon Model MA350 Multiplex Adapter—Chassis only.
Net Each..**$49.95**


F250

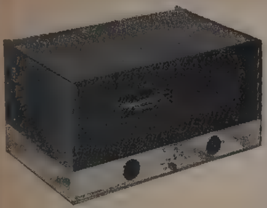
"THE LYRIC" MODEL F250 FM TUNER

Remarkably sensitive, low noise FM tuner incorporates "Gated Beam" limiter with zero time constant grid circuit for superior impulse noise rejection and uniform output. Exceptionally wide band IF's for low distortion and full frequency response. New bar-type tuning indicator provides visual aid for critical tuning. Strong AFC action retunes stations by ratio of 10:1; remarkable stability insures drift-free operation even with AFC defeated. **Sensitivity:** 0.95 μv for 20 db quieting. **Distortion:** Less than 0.1% at 30% modulation. **Antenna Input:** 300 ohms. **Outputs:** FM Multiplex, two low-Z (one each channel). **Controls:** Selector (FM, FM-AFC, Aux. and Multiplex); FM Tuning. **Tubes:** 10. **Size:** 15 13/16" w. x 13" d. x 4¾" h. Weight, 13 lbs.

Harman-Kardon Model F250 Lyric—Chassis only.
Net Each..**$129.95**
Harman-Kardon Model TC50 Enclosure—Copper, black. Net Each.................................... **12.50**

dynakit Hi-Fi, Stereo Kits, Cartridges

NEW STEREO-70 AMPLIFIER KIT



Two independent power amplifiers provide 35 watts output on each channel from a single, rugged power supply; may be combined for 70 watts monophonic. Uses 7199 driver and push-pull EL-34 tubes operated at ½ of maximum ratings. Patented circuitry assembled on printed-circuit board. Power supply is low impedance, choke filtered type. **Power Output:** 35 watts continuous; 80 watts peak, each channel. **Frequency Response:** ±0.5 db, 10-40,000 cps. **IM Distortion:** Less than 1% at 35 watts; 0.05% at 1 watt. **Hum and Noise:** Inaudible; 90 db below 35 watts. **Output Impedances:** 4, 8, and 16 ohms. **Damping Factor:** 15. **Channel Separation:** 55 db, minimum. **Tubes:** 4-EL34, 2-7199, 1-GZ34. **Other Features:** Matched tubes, dual Dyna Biasets for non-critical adjustment, power for two preamps without interaction; fuse post, stereo-mono switch and on-off switch. Has bright nickel chassis, vinyl coated charcoal brown cover. **Size:** 13" x 9½" x 6½". Shipping Weight, 32 lbs.

Dynakit Stereo-70 Amplifier Kit—Net Each.......... **$99.95**
Dynakit Stereo-70 Amplifier—Factory wired. Net....**$129.95**

MARK III 60-WATT AMPLIFIER KIT

Printed circuit assembly permits construction by anyone within three hours; absolutely no balancing or critical adjustments required. Dyna Biaset permits accurate bias adjustment independent of meter accuracy. Choke filtering. **Power Output:** 60 watts continuous; 140 watts peak. **Frequency Response:** Better than ±0.5 db, 6-60,000 cps; ±0.1 db, 20-20,000 cps below 60 watts. **IM Distortion:** Less than 1% at 60 watts; 0.5% at 50 watts; less than .05% at 1 watt. **Noise:** 90 db below 60 watts with choke filtering. **Transient Response:** Unequaled on pulses, square waves, etc. **Output Impedances:** 4, 8, and 16 ohms. **Tubes:** 2 matched KT-88's, 1-6AN8, GZ-34, selenium rectifier. **Preamp Provision:** Socket permits draw of 200-400 v. DC at 20 ma, and 6.3 v. AC at 1 amp for preamps without power. **Other Features:** Fuse holder and extra heavy-duty parts. **Size:** 9" x 9" x 6¾" high. Weight, 28 lbs.

Dynakit Mark III Amplifier Kit—All components supplied with assembly instructions. Net Each........... **$79.95**
Dynakit Mark III Amplifier—Factory wired. Net.....**$99.95**
Dynakit Mark III 70-Volt Output Kit—60 w. amplifier with added 70 volt output for public address use. Same size and weight as Mark III. Net Each..............................**$84.95**

NEW MARK IV 40-WATT AMPLIFIER KIT

Basic 40-watt amplifier equivalent to half of the Dynakit Stereo-70. Preassembled printed circuitry permits assembly in less than three hours. **Power Output:** 40 watts; 80 watts peak. **Frequency Response:** ±0.5 db, 10-40,000 cps. **IM Distortion:** Less than 1% at 40 watts; 0.05% at 1 watt. **Hum and Noise:** Inaudible; 90 db below 40 watts. **Output Impedances:** 4, 8 and 16 ohms. **Damping Factor:** 15. **Tubes:** 2-EL34, 1-7199, 1-GZ34. **Other Features:** Matched tubes, Biaset for non-critical adjustment, preamp power socket, fuse post, on-off switch, nickel chassis and vinyl coated charcoal brown cover. **Size:** 14" w. x 5" d. x 6½" h. Shipping Weight, 20 lbs.

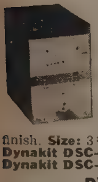
Dynakit Mark IV Amplifier Kit—Net Each.......... **$59.95**
Dynakit Mark IV Amplifier—Factory wired. Net Ea...**$79.95**

MARK II 50-WATT AMPLIFIER KIT

Power Output: 50 watts continuous; 120 watts peak. **Frequency Response:** ±0.5 db, 6-60,000 cps; ±0.5 db, 16-25,000 cps at 50 watts. **IM Distortion:** Less than 1% at 50 watts; 0.5% at 35 watts; less than 0.15% at 1 watt. **Noise:** 80 db below 50 watts. **Output Impedances:** 8 and 16 ohms. **Damping Factor:** 15. **Tubes:** 2-EL34, 1-6AN8, 1-5U4GB, selenium rectifier. **Other Features:** Same as Mark III, less extra heavy duty parts and fuse holder. **Size:** 9" x 9" x 6¾". Weight, 27 lbs.

Dynakit Mark II Amplifier Kit—Net Each.......... **$69.75**

DYNAKIT DSC-1 STEREO CONTROL



Adds complete stereo control facilities to a pair of Dynakit preamplifiers, or other makes with adequate control flexibility. Completely passive network has negligible loss of signal; introduces no noise or distortion. Provides master volume, balance, blend, channel reverse, and loudness compensation controls. Stereo tape AB monitor facilities provided. Connects by four cables to tape monitor inputs and tape outputs of preamplifiers; also connects between separate power amplifiers and preamplifiers; no modifications required on present equipment. Specify bone white or charcoal brown finish. **Size:** 3¾" w. x 6" d. x 5½" h. Weight, 2 lbs.

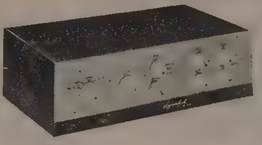
Dynakit DSC-1 Stereo Control Kit—Net Each........ **$12.95**
Dynakit DSC-1 Stereo Control—Factory wired. Net...**$18.95**

DYNAKIT PS-1 POWER SUPPLY

Dual power supply kit; provides power for two preamplifiers. **Size:** 5" w. x 5" d. x 2" h. Shipping Weight, 2½ lbs.

Dynakit Model PS-1 Power Supply Kit—Net Each...... **$8.95**
Dynakit Model PS-1 Power Supply—Factory wired. Net.**$14.95**

NEW STEREO PREAMPLIFIER KIT



Flexible, single chassis design incorporates the famous Dynakit monophonic preamplifier circuitry including unique blend control that eliminates the "hole in the middle". Features built-in full wave power supply, DC operated heaters for minimum noise, and preassembled printed circuits for quick, easy assembly. **Inputs:** RIAA, NAB tape head and Special for stereo low level; FM Multiplex, AM-FM, Auxiliary and Tape Monitor for stereo high level. **Outputs:** Low-impedance audio and tape (unaffected by tone or volume controls). **Controls:** Selector; Volume; Balance; Blend; separate Bass and Treble for each channel; Tape Monitor Switch; Loudness Switch; Power Switch. **Distortion:** Under 0.05% IM at normal output. **Frequency Response:** ±.5 db, 6-60,000 cps. **Noise:** Less than 3 µv, RIAA. **Tubes:** 4-12AX7/ECC83, 1-6X4. **Other Features:** DC heater supply, 4 convenience AC outlets, textured vinyl finish; panel mounting provision using No. PM-3 accessory kit. **Size:** 13" w. x 8" d. x 4" h. Shipping Weight, 11 lbs.

Dynakit Model PAS-2 Stereo Preamplifier Kit—Net.. **$59.95**
Dynakit Model PAS-2 Stereo Preamplifier—Wired. Net **$99.95**

DYNAKIT PAM-1 PREAMPLIFIER KIT

Flexible high gain control unit designed for outstanding performance quality. Printed circuit module for easy construction without harming critical parts; all feedback circuitry lowers distortion and noise; provides improved response and stability. **Inputs:** Low level mag. cartridge, high level mag. cartridge, radio, TV, tape, and special low level for RIAA phono, tape or mike. **Outputs:** Tape and audio. **Controls:** Selector and equalization (RIAA, 78 and Orig. LP), bass (±20 db at 20 cps), treble (±14 db at 20 kc), volume, tape monitor, loudness, and hum balance. **Distortion:** Less than 0.05% at sufficient output to drive all power amplifiers at any volume level. **Frequency Response:** ±0.5 db, 6-60,000 cps at any volume level. **Noise:** Less than 3 µv on RIAA; 1.5 µv on mike; 70-74 db below 10 mv, magnetic cartridge. **Tubes:** 2-12AX7 (ECC-83), 1 selenium stack. **Power Required:** 200-400 v. DC at 3-4 ma; 6 v. AC at 0.75 amp. **Special Features:** 4 convenience AC outlets; integral DC heater supply; choice of bone white or charcoal brown vinyl finish. **Size:** 12" x 6" x 2¾". Shipping Weight, 7 lbs.

Dynakit PAM-1 Preamplifier Kit—Net Each........ **$34.95**
Dynakit PAM-1 Preamplifier—Factory wired. Net Ea..**$59.95**

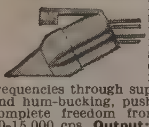
PREAMPLIFIER ACCESSORIES

Dynakit Model PM-2S Stereo Panel Mount Kit—Single front panel and handy mounting brackets for mounting 2 Dynakit preamplifiers and DSC-1. Solid brass panel; vertical or horizontal placement. Shipping Weight, 3 lbs. Net Each..... **$5.95**

Dynakit Model CM-2S Cabinet Set—Front plate, as above, and walnut table-top cabinet combination for the Dynakit stereo center (2 preamplifiers plus DSC-1). Net Each.. **$17.95**

Dynakit Model PM-1 Preamplifier Mounting Kit—Easy panel mount for a single Dynakit preamplifier; no critical work involved. No visible screws. Weight, 1 lb. Net Each..... **$2.95**

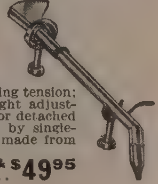
NEW B & O STEREODYNE II CARTRIDGE



Magnetic stereo cartridge for superior hi-fi reproduction from either stereo or monophonic records. Features symmetrical, moving iron design for identical performance of both channels; cancels noise and distortion components in the vertical channel. Stereo effect preserved even at highest frequencies through superior channel separation. Low impedance and hum-bucking, push-pull design plus mu-metal shielding for complete freedom from hum. **Frequency Response:** ±2 db, 30-15,000 cps. **Output:** 7 mv per channel at 5 cm/sec. at 1 kc. **Channel Separation:** In excess of 22 db. **Compliance:** 5×10^{-6} cm/dyne in all directions. **Tracking Force:** 2-4 grams. **Weight:** 10 grams. **Recommended Load:** 47,000 ohms or higher. **Stylus:** 0.7 mil diamond.

Dynaco B & O Stereodyne II Cartridge—Complete with 4 mounting clips for 3-wire, 4-wire stereo or 2-wire monophonic connection. Net Each.............................. **$29.95**
Replacement Stylus—0.7 mil diamond. Net Each......**$14.95**

NEW STEREODYNE ARM & CARTRIDGE



Stereodyne cartridge united with novel tone arm in dramatic Danish design for unequaled performance. Arm features dynamic balance, low inertial mass and hardened steel bearings in gyro-pivoted gimbal mounting for sure tracking with low force. Assures clearer sound, better separation and increases stylus and record life. Stylus pressure adjustable by spring tension; spring is removable for pressure set weight adjustment if desired. Stylus is easily replaced or detached for inspection. Easy installation assured by single-hole mounting with height adjustments made from above the turntable base.

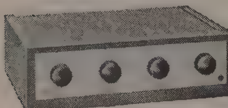
Dynakit Model TA-12 Stereodyne Arm & Cartridge—Net Each.................... **$49.95**

EICO Excellence in Hi-Fi KIT OR WIRED

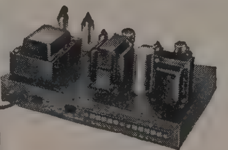
HF-85

HF-81

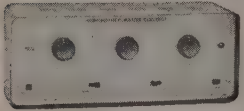
HF-65A



HF-12



HF-86



HF-61A

HF-81 STEREOPHONIC DUAL AMPLIFIER-PREAMPLIFIER

A complete high fidelity stereophonic control center and a pair of 14-watt amplifiers, all on one chassis. Separate low level input in each channel; circuitry carefully designed to provide the high gain required; separate high level inputs; input switch has positions for feeding FM tuner output to one channel and AM tuner to other or FM tuner to one channel and FM multiplex adapter output to other. Ganged level controls; independent full-range bass and treble tone controls in each channel; tone controls of the low distortion variable cross-over feedback type. Identical Williamson type, push-pull EL84 power amplifiers with high quality output transformer; AC outlets. "Low-silhouette" construction employing horizontal chassis for proper layout. "Service Selector" switch permits paralleling two internal power amplifiers for use in one channel and using external amplifier for other channel **Power Output:** 28 watts (two 14-watt channels); 56 watts peak. **Frequency Response:** 2 w. (1 w. each channel) ±0.5 db, 10-100,000 cps. **IM Distortion:** (At 60 and 6,000 cps at 4:1)—2% at 28 watts (14 watts each channel); 0.5% at 10 watts (5 watts each channel). **Harmonic Distortion:** Below 1%. **Hum and Noise:** Mag. phono, 60 db; tape head, 51 db; mike, 57 db; tuners, aux., 75 db. **Sensitivity:** Mag. phone, 4 mv; tape head, 2 mv; mike, 6 mv; tuner, aux., 0.5 v. **Output Impedance:** 4, 8, 16, 32 ohms. **Controls:** Input (Phono, Tape, Mike, AM-FM, FM-Multi, Aux A, Aux B); Mode (Amp. 1, Amp. 2, Stereo, Reverse, Mono. 1, Mono. 2); 2-Level; Bass; Treble/On-Off; Tape Switch (3¾, 7½ and 15). **Tubes:** 4-ECC83/12AX7, 2-ECC82/12AU7, 4-EL84, 2-EZ81. **Size:** 15″ w. x 10½″ d. x 4¾″ h. Weight, 24 lbs.

Eico Model HF-81 Stereophonic Dual Amplifier-Preamplifier—Wired. (Including cover). Net Each.. $109.95

Eico Model HF-81K Stereophonic Dual Amplifier-Preamplifier Kit—(Including Cover) Net Each.................... $69.95

HF-85 STEREOPHONIC DUAL PREAMPLIFIER

A complete stereophonic control center with a high versatility in controls and switching facilities. Extremely low distortion is hardly measurable even at high output levels. Completely self-powered for operation with any two power amplifiers. Separate high level and low level inputs for each channel. Built-in clutch for operating controls together. AC outlets provided for power amplifiers. **Frequency Response:** ±0.3 db, 5-200,000 cps. **IM Distortion:** (60-7,000 cps at 4:1) .07%, 3 v. rms out. **Harmonic Distortion:** 0.1% at 5 v. rms out, 20-20,000 cps. **Hum and Noise:** Mag. phono and mike, 60 db; tape head, 50 db; high level inputs, 75 db. **Sensitivity:** Mag. phono and mike, 1 mv; tape head, 0.5 mv; high level inputs 0.17 v. (input for 2 v. rms output at 1,000 cps). **Output Impedance:** 1,400 ohms. **Controls:** Input (Phono, Tape, Mike, AM-FM, FM-Multi, Aux A, Aux B); Mode (Amp. 1, Amp. 2, Stereo, Reverse, Monophonic 1, Monophonic 2); Level (may be operated with built-in clutch); Bass; Treble; Tape Switch (3¾″, 7½″ and 15″/sec.); Off-On; Hum Balance on rear. **Tubes:** 5-12AX7/ECC83, 1-6X4. Solid brushed brass control plate and perforated steel cover that slides in and out on rails in the side pieces. **Size:** 12″ w. x 8¼″ d. x 3⅝″ h.

Eico Model HF-85 Stereo Preamplifier—Wired. Net... $64.95

Eico Model HF-85K Stereo Preamplifier Kit—Net Ea.. $39.95

HF-86 NEW STEREOPHONIC DUAL POWER AMPLIFIER

A dual power amplifier for stereo use with the HF-85 stereo preamp or any self-powered stereo preamp. Each power amplifier has a Williamson-type circuit with an output of 14 watts. May be operated in parallel for 28 watts monophonic output. Service selector switch for versatility, level control at each input, AC power switch, two outlets, and a fuse. Trouble-free point-to-point wiring. **Power Output:** 28 watts (two 14 watt channels); 56 watts peak. **Frequency Response:** 2 watts (1 w. each channel), ±0.5 db, 10-100,000 cps. **IM Distortion:** (60 and 7,000 cps at 4:1) 1.5% at 28 watts (14 w. each channel); 0.5% at 10 watts (5 w. each channel); 0.3% at 4 watts (2 w. each channel). **Harmonic Distortion:** Less than 1%, 30-15,000 cps. **Hum and Noise:** 90 db below rated output. **Transient Response:** Excellent squarewave reproduction negligible ringing; rapid setting on 10 kc squarewave. **Inverse Feedback:** 20 db. **Stability Margin:** 15 db. **Sensitivity:** 1.15 volts for 14 watt output. **Output Impedances:** 4, 8, 16, and 32 ohms each channel. **Controls:** Separate Level (Chan. 1, Chan. 2); Service Selector Switch; On-Off Switch. **Tubes:** 4-EL84, 2-EZ81, 2-12DW7. **Power Consumption:** 115 watts, 117 v. AC, 60 cps. **Size:** 13½″ w. x 9″ d. x 5″ h. Shipping Weight, 16 lbs,

Eico Model HF-86 Stereophonic Amplifier—Wired and tested. Net Each.................................... $74.95

Eico Model HF-86K Stereophonic Amplifier Kit—Net. $43.95

HF-65 HIGH FIDELITY PREAMPLIFIER

A superb monophonic master control preamplifier incorporating almost every desired control feature and input an audiophile could want, including tape head and microphone inputs, two-position scratch and rumble filters, continuously variable loudness control plus separate level control. Includes three-stage tone control circuit comprised of a 30 db feedback amplifier pair driving a true variable crossover feedback tone control stage. Adaptable to any panel thickness for easy console installation. **Frequency Response:** ±0.3 db 5-200,000 cps at any level up to 3 v. rms out. **IM Distortion:** (60 and 7,000 cps at 4:1) .07% at 3 v. rms out **Harmonic Distortion:** 0.1% at 3 v. rms out, 20-20,000 cps. **Hum and Noise:** Mag. phono, 60 db; microphone, 60 db; tape head, 50 db; high level inputs, 75 db. **Sensitivity:** Lo mag. phono, 1 mv; hi mag. phono, 3 mv; microphone, 1 mv; tape head, 0.5 mv; high level inputs, 0.17 v. (input for 2 v. rms output at 1000 cps) **Output Impedance:** Tape recorder, 1400 ohms; main amplifier, 770 ohms. **Controls:** Input (Tape head, Mike, Tuner, TV, Aux. RIAA, Columbia, London, 78); Level/Loudness; Bass/Treble Rumble Filter; Scratch Filter. **Tubes:** 3-12AX7/ECC83, 1-6X4 **Size:** 12″ w. x 8¼″ d. x 3⅝″ h. Weight, 9 lbs.

Eico Model HF-65A Preamplifier—Wired. Net Each.. $44.95

Eico Model HF-65AK Preamplifier Kit—Net Each.... $29.95

Eico Model HF-65 Preamplifier With Power Supply—Wired. Net Each.................................... $49.95

Eico Model HF-65K Preamplifier Kit With Power Supply—Net Each.................................... $33.95

HF-12 12-WATT WILLIAMSON-TYPE INTEGRATED AMPLIFIER

Provides complete front-end, including built-in preamplifie equalizer and control section. Direct tape head and magnetic phon inputs with NAB (tape) and RIAA (phono) equalization. Six-tub circuit, dual triode for variable turnover bass and treble. **Powe Output:** 12 watts continuous, 25 watts peak. **IM Distortion:** (6 and 6000 cps @ 4:1) 1.5% @ 12 watts; 0.55% at 6 watts; 0.3% a 4 watts. **Response:** 1 watt: 12-50,000 cps, ±½ db. 12 watt 25-20,000 cps, ±½ db. **Damping Factor:** 20-15,000 cps, above **Tone Control Ranges:** At 10 kc, ±13 db; at 50 cps, ±16 d **Impedances:** 4, 8, 16 ohms. **Tubes:** 9. **Size:** 12″ w. x 8¼″ d. 3⅝″ h. Weight, 13 lbs.

Eico Model HF-12 Integrated Amplifier—Wired, ready to use. Net Each.................................... $57.95

Eico Model HF-12K Integrated Amplifier Kit—Net... $34.95

HF-61A HIGH FIDELITY PREAMPLIFIER

Features: Five all-feedback, low-distortion equalizations. Hig and low end filter circuits of feedback type, effective on all input Filter circuits inserted in feedback pair audio amplifier by tw three-position slide switches. Variable turnover, low-distortio feedback tone controls do not affect volume or mid-frequencie Centralab printed-circuit Senior "Compentrol" loudness contro provides adjustable Fletcher-Munson compensation or no compensation, as desired. Two magnetic cartridge inputs. Hum balance control. Low impedance cathode follower output. **Inputs:** Four high level switched (Tuner, TV, Tape, Aux.); three low level Provides proper pickup for all leading magnetic and crystal cartridges and FM. Four convenience outlets, three controlled by on-off switch and one "live" for changer. **Response:** 8-100,000 cps, ±1 db; 12-50,000 cps, ±0.3 db. **Sensitivity:** 10 mv at 1,000 cps with level and loudness controls set at maximum gain. **Hum & Noise:** (With tone controls flat, loudness control at maximum and selector at COL): Tuner, input, 75 db below 2 v. rms; phono, 6 db below 2 v. rms. **IM Distortion:** (60 cps and 6 kc @ 4:1) 0.05 at ½ v. rms output. **Harmonic Distortion:** 0.1% at 1½ v. rm output. **Tone Control Range:** At 10 kc, ±15 db; at 50 cps, ±15 d **Rumble Filter:** 50 cps or 100 cps at 12 db/octave cutoff. **Scratch Filter:** 5 kc or 10 kc at 12 db/octave cutoff. **Controls:** Input (Tap TV, Tuner, Aux., COL, LON, RIAA, AM78, EUR 78); Leve Loudness; Bass/Treble; Phono 1, 2; Rumble; Scratch; Powe On/Off. **Tubes:** 1-12AX7/ECC83, 2-12AU7/ECC82; 1-6X4 **Size:** (In case) 12⁵⁄₁₆″ w. x 4⅞″ d. x 4⅞″ h. Weight, 8 lbs.

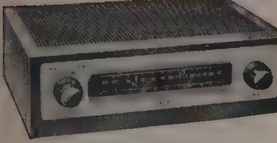
Eico Model HF-61A Preamplifier—Wired, ready to use. Net Each.................................... $37.95

Eico Model HF-61AK Preamplifier Kit—Net Each ... $24.95

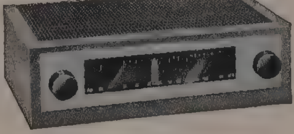
Eico Model HF-61 Preamplifier With Power Supply—Wired. Net Each.................................... 44.95

Eico Model HF-61K Preamplifier With Power Supply—Kit form. Net Each.................................... 29.95

EICO Excellence in Hi-Fi KIT OR WIRED



HFT-94



HFT-90

HF-60, HF-50

NEW HFT-94 AM TUNER

A basic FM tuner, designed for high fidelity applications, matching the HFT-90 FM Tuner in appearance, and in size. **Features:** A wide bandpass to 14 kc or a narrow bandpass to 7 kc for weaker or distant stations. A high-Q filter eliminates 10 kc whistle while reducing response by no more than 3 db at 9 kc. Tuned RF stage for high selectivity and sensitivity. Low noise and distortion. Traveling tuning eye indicator that contracts into an "exclamation point" at the center of each broadcast channel. Has a slide rule dial with flywheel tuning. Auxiliary recording output, front-panel volume control and On-Off switch, and a built-in ferrite loop antenna add to its features. RF and IF coils are supplied prealigned. Test instruments not required for satisfactory operation of the completed kit. Point-to-point wiring for trouble-free operation. **Sensitivity:** 3 μv at 30% mod. for 1.0 v. output, 20 db signal to noise ratio. **Frequency Response:** (Wide) −3 db, 20-9,000 cps; (Narrow) −3 db, 20-5,000 cps. **Image Rejection:** 58 db. **Hum Level:** 60 db below rated output with 3 μv input. 30% modulation (1.0 v.). **Distortion:** Less than 1% harmonic distortion at 100% modulation. **Controls:** Bandwidth Selector; Level/Power On-Off; Tuning. **Output:** Low impedance plate follower (8,000 ohms). Extra recording output. **Tubes:** 2-6BA6, 1-6BE6, 1-12AU7/ECC82, 1-6X4, 1CK885 diode, 1-DM70 tuning eye. **Power Consumption:** 40 watts, 110-125 v. AC, 60 cps. **Size:** 12″ w. x 8¼″ d. x 3⅝″ h. Shipping Weight, 12 lbs.

Eico Model HFT-94 AM Tuner—Wired and tested. (Including cover). Net Each.......................... $65.95*

Eico Model HFT-94K AM Tuner Kit—(Including cover). Net Each.......................................$39.95*

HFT-90 FM TUNER

Among the most advanced FM tuners in today's market. The first kit to include an entirely pre-wired and aligned "front end". Exceptional sensitivity and low noise. **Features:** Traveling tuning indicator that moves along the slide-rule dial, blooming into an exclamation point at exact center of a broadcast channel. Sensitivity is six times greater than other kit tuners, providing greater fringe area reception. Flywheel tuning and automatic gain control for more versatility. Stabilized low-limiting threshold assures high performance from weak signals; broadband radio detector improves capture ratio and tuning. Low distortion and flat frequency response for superb audio quality. Will mount in console regardless of thickness of panel board. Optional cabinet may be used to provide extra shielding. **Sensitivity:** 1.5 μv for 20 db quieting. **Frequency Response:** Uniform from 20-20,000 cps, ±1 db. **Inputs:** 300 ohm, balanced. **IF Bandwidth:** 260 kc at 6 db points. **Stability:** 20 kc drift maximum, stable after one minute. **Hum:** 60 db below 1 volt. **Controls:** Tuning; Level/Power On-Off. **Outputs:** Cathode follower up to 200 ft.; 10 μv input for 1.0 volt output; multiplex output provided. **Detector Characteristic:** Peak sep. of 600 kc; linear bandwidth, 400 kc. **Radiation:** Fully shielded and preassembled oscillator circuit and tube cut radiation to minimum. **Tubes:** 1-ECC85/6AQ8, 3-6AU6, 1-6AL5, 1-6C4, 1-6X4, 1-DM70. **Power Required:** 40 watts, 110-125 v. AC, 60 cps. **Size:** 12″ w. x 8¼″ d. x 3⅝″ h. Shipping Weight, 10 lbs.

Eico Model HFT-90 FM Tuner—Wired, less cover. Net $65.95*

Eico Model HFT-90K FM Tuner Kit—Less cover. Net.$39.95

Eico Cover—For above tuner models. Net Each.........$3.95

*F.E.T. included.

HF-60 ULTRA-LINEAR 60-WATT AMPLIFIER

Featuring **Acro TO-330** output transformer (fully potted) for complete linearity; EF86 low-noise voltage amplifier direct-coupled to 6SN7GTB cathode-coupled phase inverter driving a pair of ultra-linear connected push-pull EL34 output tubes, operated with fixed bias. **Power Output:** Continuous, 60 watts; peak, 130 watts. **IM Distortion** (60 and 6000 cps at 4:1): Less than 1% at 60 watts; less than 0.5% at 50 watts. **Sensitivity:** 0.55 v. for 60 watts. **Damping Factor:** 17. **Hum:** 90 db below rated output. **Impedances:** 4, 8, 16 ohms. Extra-rugged GZ34 rectifier; input level control; panel-mount fuse holder; both bias and DC balance adjustments; standard octal socket provided for preamp power take-off. **Size:** 14″ w. x 8″ d. x 7″ h.

Eico Model HF-60 Ultra-Linear Amplifier—Wired, ready to use. Net Each.................................... $99.95

Eico Model HF-60K Ultra-Linear Amplifier Kit—Net. .$72.95

Eico Model E-2 Matching Cover (Not illustrated)—Net. 4.50

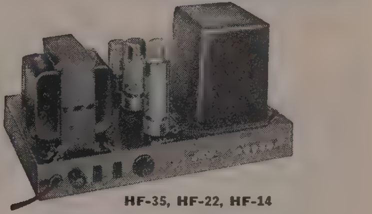
HF-50 ULTRA-LINEAR 50-WATT AMPLIFIER

Similar in appearance to Model HF-60 above but with superb Chicago Standard output transformer. **Power Output:** 50 watt continuous; 100 watts peak. **IM Distortion** (60 and 6,000 cps @ 4:1): Less than 1% at 50 watts; 0.5% at 45 watts. **Response:** 6-60,000 cps, ±½ db; 15-30,000, ±0.1 db at any level from 1 mw to rated power. No peaking or raggedness outside audio range. All other specifications similar to Model HF-60 above.

Eico Model HF-50 Ultra-Linear Amplifier Wired, ready to use. Net Each.................................... $87.95

Eico Model HF-50K Ultra-Linear Amplifier Kit—Net. $57.95

Eico Model E-2 Matching Cover (Not illustrated)—Net 4.50



HF-35, HF-22, HF-14

HF-35 ULTRA-LINEAR 35-WATT POWER AMPLIFIER

For monophonic use with HF-65A and in pairs with HF-85 for stereophonic installations. High power; wide band width, virtually absolute stability and flawless transient response. Maintains its superb characteristics under speaker load and does not exhibit bounce or flutter under pulsed conditions. EF86 low-noise pentode amplifier direct-coupled to 6SN7GTB cathode-coupled phase inverter; EL34 output pentodes in a push-pull ultra-linear output stage; extra-rugged GZ34 rectifier tube with indirectly heated cathode that eliminates high starting voltage on the electrolytic filter capacitor and delays application of the full B+ until the amplifier tubes warm up. Heavy duty power transformer; excellent quality output transformer with ultra-linear screen taps. **Power Output:** 35 watts, 70 watts peak. **Frequency Response:** 1 watt, ±0.5 db 5-60,000 cps; ±1.5 db 5-100,000 cps. 35 watts, ±0.5 db 15-40,000 cps; ±1.5 db 15-60,000 cps; ±0.1 db 20-30,000 cps at any level from 1 mw to 35 watts. No peaking or raggedness outside audio range. **IM Distortion:** 1.5% at 35 watts, .15% at 20 watts at 60 cps and 7 kc at 4:1. **Harmonic Distortion:** Below 1% at any frequency from 20 cps to 20 kc within 1 db of 35 watts. **Hum:** 90 db below rated output. **Sensitivity:** .43 v. for 35 watts output. **Damping Factor:** Above 10, 20 cps to 20 kc, 15 at 1 kc. **Output Impedance:** 4, 8, and 16 ohms. **Power Required:** 130 watts, 117 v., 60 cps. **Tubes:** 1-EF86/Z729, 1-6SN7GTB, 2-EL34/6CA7, 1-GZ34. **Size:** 14″ w. x 8″ d. x 7″ h. Shpg. Wt., 25 lbs.

Eico Model HF-35 Ultra-Linear Amplifier—Wired. Net. $72.95

Eico Model HF-35K Ultra-Linear Amplifier Kit—Net. .$47.95

Eico Model E-2 Matching Cover (Not Illustrated)—Net. 4.50

HF-22 ULTRA-LINEAR 22-WATT POWER AMPLIFIER

For monophonic use with HF-65A and in pairs with HF-85 for stereophonic installations; high power; wide band width; virtually absolute stability and flawless transient response. EF 86 low-noise pentode amplifier, cathode-coupled phase inverter. Heavy duty power transformer; excellent quality output transformer with ultra-linear screen taps. **Power Output:** 22 watts, 44 watts peak. **Frequency Response:** 1 watt, ±0.5 db, 5-50,000 cps, ±1.5 db 5-100,000 cps; 22 watts, ±0.5 db 19-40,000 cps, ±1.5 db 15-60,000 cps; ±0.1 db 25-30,000 cps at any level from 1 mw to 22 watts. No peaking or raggedness outside audio range. **IM Distortion:** (At 60 cps and 7 kc at 4:1) 1% at 22 watts, 0.25% at 10 watts. **Harmonic Distortion:** Below 1% at any freq. from 20 cps to 20 kc within 1 db of 22 watts. **Hum:** 85 db below rated output. **Sensitivity:** .6 v. for 22 watts output. **Damping Factor:** Above 12, 20 cps to 20 kc, and 21 at 1 kc. **Output Impedance:** 4, 8 and 16 ohms. **Tubes:** 1-EF86/Z729, 1-6SN7GTB, 2-6L6GB, 1-5U4GB. **Power Consumption:** 90 watts, 117 v., 60 cps. **Size:** 14″ w. x 8″ d. x 7″ h. Shipping Weight, 25 lbs.

Eico Model HF-22 Ultra-Linear Amplifier—Wired. Net Each.. $61.95

Eico Model HF-22K Ultra-Linear Amplifier Kit— Net Each...$38.95

Eico Model E-2 Matching Cover (Not Illustrated)—Net 4.50

HF-14 BASIC POWER 14-WATT AMPLIFIER

For use in stereo (with HF-12) or monophonic systems. Two EL84 output tubes in push-pull, provide high stability. High quality output transformer; no bounce or flutter under pulsed conditions. **Power Output:** 14 watts continuous; 28 watts peak. **Frequency Response:** 1 watt, ±0.5 db, 15-100,000 cps or ±1.5 db, 15-125,000 cps; 14 watts, ±0.5 db, 25-25,000 cps or ±1.5 db, 20-60,000 cps; ±1 db, 30-15,000 cps at any level from 1 mw to 14 watts; no peaking or raggedness outside audio range. **Distortion:** IM, 0.1% at 4 watts, 0.33% at 6 watts, 1.7% at 14 watts; harmonic, less than 2%, 30-10,000 cps within 1 db of 14 watts output. **Hum:** 90 db below rated output. **Sensitivity:** 1.25 v. for 14 watts output **Damping Factor:** Above 8, 20-20,000 cps. **Output Impedance:** 4, 8 and 16 ohms. **Tubes:** 1-ECC83/12AX7, 2-EL84, 1-EZ81 **Power Consumption:** 65 watts, 117 v., 60 cps. **Size:** 12″ w. x 4″ d. x 3¾″ h. Shipping Weight, 10 lbs.

Eico Model HF-14 Basic Power Amplifier—Wired. Net. $41.50

Eico Model HF-14K Basic Power Amplifier Kit—Net. .$23.50

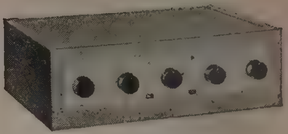
Eico Model E-6 Matching Cover (Not Illustrated)—Net 4.50

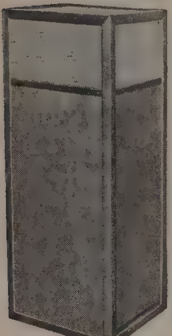
651X-59A

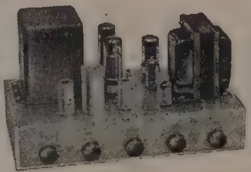
EICO Excellence in Hi-Fi KIT OR WIRED

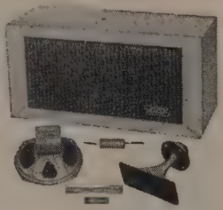
HF-20

HF-30


HF-32


HFS-2


HF-52


HFS-1

HF-20 ULTRA-LINEAR 20-WATT WILLIAMSON-TYPE AMPLIFIER

Complete with preamplifier-equalizer and control section. **Featuring:** Low distortion feedback tone controls (don't affect volume or mid-frequencies); five feedback equalizations for LP's, 78's; Centralab printed-circuit Senior "Compentrol" loudness control; level control. **Inputs:** Four high level switched (Tuner, TV, Tape, Aux.); two low-level for proper loading of all cartridges. **Power Output:** Continuous, 20 watts; peak, 34 watts. **Power Response:** (20 watts) 20-20,000 cps, ± ½ db; 10-40,000 cps, ± 1½ db. **Frequency Response:** (¼ watt) 13-35,000 cps, ± ½ db; 7-50,000 cps, ± 1½ db. **IM Distortion:** (60 cps and 6,000 cps @ 4:1) 1.3% at rated power. **Harmonic Distortion:** 1% max., 20-20,000 cps within 1 db of rated power; 0.3% mid-band at rated power. Hum balance control; DC is superimposed on filament supply. Extremely fine output transformer. **Damping Factor:** 7:1. **Impedances:** 4, 8, 16 ohms. **Power Consumption:** 100 watts at 110-120 v., 60 cps. **Tubes:** 1-6SL7, 2-6L6GB, 2-12AX7, 1-5U4GB. **Size:** 8½" x 15" x 10". Weight, 24 lbs.

Eico Model HF-20 Ultra-Linear Amplifier—Wired, ready to use. Net .... $\$79^{95}$
Eico Model HF-20K Ultra-Linear Amplifier Kit—Net. **$49.95**
Eico Model E-1 Matching Cover (Not illustrated)—Net **4.50**

HF-30 BASIC 30-WATT AMPLIFIER

High powered, extra stable unit utilizes EL84 output tubes for extra sensitivity and exceptional reliability. **Features:** Phase corrections at audio spectrum extremes for insured stability. Will drive any speaker load (including electrostatic types) as well as the resistive load normally used for testing. Operates from any preamp control unit with power take-off socket provided. Switched and unswitched convenience outlets to power other components. **Power Output:** 30 watts continuous, 47 watts peak. **IM Distortion:** 2% at 30 watts, 0.83% at 20 watts, 0.35% at 10 watts on 60 cps and 7 kc at 4:1. **Harmonic Distortion:** Below 1% at any frequency 20-20,000 cps within 1 db of 30 watts. **Frequency Response:** ± 0.5 db, 15-50.000 cps at 1 watt; ± 0.1 db, 15-30,000 cps at any level from 1 mw to 30 watts. **Stability Margin:** 15 db. **Hum:** 80 db below rated output. **Output Impedances:** 4, 8, and 16 ohms. **Tubes:** 1-6AV6, 1-EC90/6C4, 4-EL84, 2-EZ81. **Power Required:** 125 watts, 117 v. AC, 60 cps. **Size:** 5" h. x 12" w. x 7" d. Shipping Weight, 17 lbs.

Eico Model HF-30 Basic Amplifier—Wired, less cover. Net Each .... $\$62^{95}$
Eico Model HF-30K Basic Amplifier Kit—Less cover. Net Each **$39.95**
Eico Model E-4 Matching Cover (Not illustrated—Net.. **3.95**

HF-32 INTEGRATED 30-WATT AMPLIFIER

A compact amplifier-preamp with control section, designed for versatility and high performance. Single chassis design with printed circuit for ease of construction. Three high level and three low level inputs for versatility. Rumble and scratch filter circuits, loudness control and level control for perfect audio selectivity. Low impedance tape recorder output is useful on all inputs. Williamson type circuit consists of voltage amplifier coupled to split-load phase inverter driving output stage. DC on preamp tube insures lowest hum. **Power Output:** 30 watts, continuous; 47 watts peak. **Harmonic Distortion:** Below 1%, 20-20,000 cps within 1 db of 30 watts. **IM Distortion:** 2% at 30 watts, 1% at 20 watts, 0.5% at 10 watts at 60 cps and 7 kc at 4:1. **Frequency Response:** ± 0.5 db, 10-50,000 cps at 1 watt; ± 0.5 db, 15-50,000 cps at 30 watts. **Stability Margin:** 15 db. **Square Wave Response:** Flat 20-20,000 cps. **Output Impedances:** 4, 8, and 16 ohms. **Inputs:** Magnetic phono, tape head, mike, TV, tuner, crystal or ceramic cartridge. **Controls:** Equalization (Five Positions); Scratch and Rumble Filters; Hum Balance; Bass; Treble; Loudness; Input Selector. **Hum and Noise:** − 60 db, mag. phono; − 51 db, tape head; − 57 db, mike; − 75 db, TV, tuner and aux. (below rated output on all functions) with tone controls set flat. **Tubes:** 2-ECC83/12AX7, 2-EC90/6C4, 4-EL84, 2-EZ81. **Power Required:** 140 watts, 117 v. AC, 60 cps. **Size:** 15" w. x 10½" d. x 4¾" h. Weight, 24 lbs.

Eico Model HF-32 Amplifier—Wired and tested. Net Each .... $\$89^{95}$
Eico Model HF-32K Amplifier Kit—Net Each **$57.95**

HF-52 ULTRA-LINEAR 50-WATT AMPLIFIER-PREAMPLIFIER

Combines power amplifier essentially similar to Model HF-50, preamplifier-equalizer similar to Model HF-20. Provision for use with electronic crossover network and additional amplifiers. **Output Power:** 50-watt continuous, 100-watt peak. **Frequency Response:** 6-60,000 cps, ± ½ db; 15-30,000 cps, ± 0.1 db at any level from 1 mw to rated power. **IM Distortion:** (60 and 6,000 cps at 4:1) Below 1% at 50 watts; 0.5% at 45 watts. **Sensitivity:** 0.55 v. for 60 watts. **Damping Factor:** 17. **Hum & Noise:** 60 db below rated output on magnetic input; 75 db below on high level input. Preamplifier, equalizer and control sections feature: low distortion feedback controls (don't affect volume or mid-frequencies); five feedback equalizations for LP's and 78's; Centralab printed-circuit Senior "Compentrol" loudness control; level control. **Inputs:** Four high-level switched (TV, Tuner, Tape, Aux.); two low-level to accommodate both high and low output magnetic cartridges.

Eico Model HF-52 Amplifier-Preamplifier—Wired. Net Each .... $\$109^{95}$
Eico Model HF-52K Amplifier-Preamplifier Kit—Net **$69.95**
Eico Model E-1 Matching Cover (Not illustrated)—Net **4.50**

HFS-2 STANDARD SPEAKER SYSTEM

Major break-through in high fidelity speaker development; the first commercial system to provide the fullest possible utilization of the slot-loaded conical horn for extended bass and an omnidirectional cone tweeter for sweet, live reproduction of highs. Sound is integrated for full audio spectrum response with exceptional uniformity. **Bass Reproduction:** Covers 30-200 cps using slot-loaded split conical horn of 12 feet total length; rear loading 8½" driver used. The conical horn has a gradually sloping curve, yet transmits at all frequencies. The horn mouth is closed except for carefully determined slot apertures, boosting lower bass response by extending the horns to a near-infinite length. Two Helmholtz resonator cavities are tuned to absorb reflections from the throat region to smooth out the impedance characteristic. Uniform impedance load (± 3 db) down to 20 cps and effective loading to sub-audio frequencies assure excellent damping. Stationary loading cone on tweeter support causes an annular air space to act as a pneumatic spring for air-damping down to the lowest frequencies. **Middle Frequencies and Highs:** Separate coaxially mounted tweeter and inner loading cone for 6,000 to 20,000 cps. Edge-damped driver radiates vertically (indirectly) with fundamentals and first three harmonics radiated from the same cone to avoid phase disturbance. An inductor in series with woofer is shunted by rheostat for control of middle response as related to highs and lows for perfect match. Extreme highs are generated by super-tweeter with spike-shaped cone for a broadband response. Inner loading cone prevents beaming and provides air damping. Radiation is horizontal with supplementary vertical ring. **Rated Impedance:** 16 ohms. **Directivity:** 180° horizontal, 90° vertical. **Frequency Response:** Flat, 45-20,000 cps; 30-40,000 cps useful range without any doubling. **Power Required:** Can be driven from a 10-watt amplifier; rated to 30 watts continuous peak, to 60 watts. **Size:** 15¼" w. x 11½" d. x 36" h. Weight, 55 lbs.

Eico Model HFS-2 Speaker System—Genuine hand-rubbed mahogany or walnut hardwoods (specify). Net $\$139^{95}$
Eico Model HFS-2 Speaker System—Blond korina finish. Net Each .... $\$144^{95}$

HFS-1 TWO-WAY SPEAKER SYSTEM

Genuine two-way book-shelf size speaker system. Jensen heavy duty 8" woofer and matching compression-driver exponential horn tweeter with level control. Smooth, clean bass and crisp, extended highs—free of coloration or artificial brilliance. Factory-built tuned bass reflex birch hardwood cabinet (not a kit); neutral acoustical grille cloth. **Response:** (2' away on principal axis in anechoic chamber with 1 watt input): Woofer, 80-1,800 cps, ± 4 db. Tweeter, 2,800-10,000 cps, ± 2 db: Crossover, 1,800-2,800 cps (depending on tweeter control level setting). **Power Handling Capacity:** 25 watts. **Size:** 23" x 11" x 9". Weight, 19 lbs

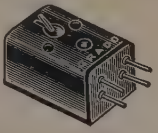
Eico Model HFS-1 Two-Way Speaker System—Wiring time 15 min. Net Each .... $\$39^{95}$

Stereo, Hi-Fi Equipment

GRADO STEREO HI-FI COMPONENTS

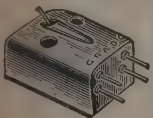
BALANCED CHANNEL STEREOPHONIC CARTRIDGES

GRADO MASTER STEREO CARTRIDGE



Features excellent channel separation, wide frequency response, and compact design that will fit all standard tone arms. Low tracking force assures proper stereo compliance and mass requirements. **Frequency Response:** 10-30,000 cps per channel. **Output:** Approx. 5 mv per channel at 10 cmv. **Impedance:** 700 ohms per channel. **Tracking Force:** 3 grams. **Channel Separation:** More than 25 db. **Interchannel Balance:** Output, ± .5 db; frequency, ± .5 db. **Input Load:** Any value above 5,000 ohms. **Stylus Mass:** .8 milligram. Radium active element for static-free operation; half-life, 1,600 years.
Grado Master Stereo Cartridge—Fits all standard tone arms. Net Each.................................... $49.50

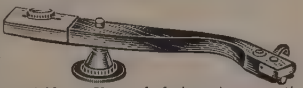
GRADO CUSTOM STEREO CARTRIDGE



Exceptional quality and ruggedness in a stereophonic cartridge. Designed for record changer use. Low tracking force and high compliance in all directions, assure proper balance and response. **Frequency Response:** 10-24,000 cps per channel. **Output:** Approx. 7 mv per channel at 10 cmv. **Impedance:** 1,000 ohms per channel. **Tracking Force:** 3 grams. **Channel Separation:** More than 20 db. **Interchannel Balance:** Output, ± .5 db; frequency, ± .5 db. **Input Load:** Any value above 5,000 ohms. **Stylus Mass:** 1 milligram.
Grado Custom Stereo Cartridge—Net Each.......... $32.50

Grado Stereo Transformer—Provides increased output for low level stereo cartridges. Frequency Response, ±1 db, 10-30,000 cps. Hum level, −90 db. Distortion unmeasurable with 40 mv input. Channel separation 50 db. Channel output balance ±0.2 db. Supplied with input leads. Net Each........ $23.50

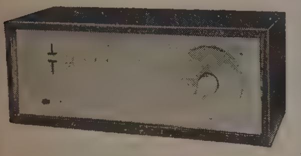
MICRO-BALANCE STEREO TONE ARM



Precision crafted, one-piece design constructed of the finest gunstock walnut wood and finely machined anodized aluminum metal fittings. Pre-wired for stereo cartridges. Unusual design stops erratic resonances due to intermittent masses; preserves the dynamic range and bass response. Single knob micrometer adjust permits the balance and tracking control. Precision ball-thrust bearing for smooth lateral movement; also damps low frequency resonance occurring at 10 cps. Spring-loaded beryllium copper bearing is self-adjusting for zero pivot clearance for perfect vertical pivoting; designed for maximum stability at all times. **Tracking Error:** ±0.8°. **Stylus Force Adjust:** ±7 grams. **Overhang Adjust:** ±¼". **Height Adjust:** 1¼". **Offset Angle:** 24.5°. **Overall Length:** 14".
Grado 12" Transcription Arm—Shipping Weight, 1 lb., 9 oz. Net Each.................................... $29.95

Grado 16" Transcription Arm—Shipping Weight, 1 lb., 12 oz. Net Each....... ....$32.50

KARG TUNERS, MULTIPLEX ADAPTER



The Tunematic is a unique FM tuner with piezoelectric oscillator that assures micro-precise, undeviating frequency selection. Call letters appear on the click-in selector dial. Completely driftless. Custom-tuned to the outstanding FM stations in your particular broadcast area.
Sensitivity: 1.0 µv for 20 db quieting on 75 ohm input; 3.0 µv for 40 db quieting on 75 ohms; 6.0 µv for 40 db and 2.0 µv for 20 db quieting on 300 ohms input. **Frequency Response:** ±0.5 db, 15-30,000 cps, antenna to outputs. **Tuning Accuracy:** Within 0.025% of correct carrier frequency. **Signal-to-Noise Ratio:** 65 db at 20 µv or over, max. **IM Distortion:** 0.5% max. at 100% modulation. **Inputs:** Balanced 300 ohms; 75-ohm coax; internal antenna. **Outputs:** 3-volt cathode follower; 0.3 volt, 600-ohm line; 0.3 volt Multiplex. **Controls:** Power; Station Selector; Level Set (adjusts 600 ohm line output). **Other Features:** Frequency crystals are turret arranged with selector switch for maximum efficiency. Oscillator tube is within crystal turret for minimum radiation; double shielded construction. Audio output level is constant regardless of signal input 3 µv through 100,000 µv. Simplified alignment achieved using VTVM connected to test jacks in the chassis. **Tubes:** 7 including rectifier, plus 4 diodes. **Size:** 16" w. x 5½" d. x 5½" h. in metal enclosure. Shipping Weight, 13 lbs. **Note: Specify Frequencies desired or area location when ordering.**

Karg Tunematic Model XT-1 Twelve-Channel—Net Each.. $199.50

Karg Tunematic Model XT-1 Ten-Channel—Net Ea.. $189.50
Karg Tunematic Model XT-1 Eight-Channel—Net... 179.50
Kark Tunematic Model XT-1 Six-Channel—Net Ea.. 169.50

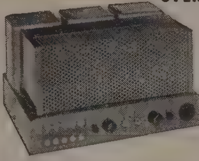
Karg Birch or Walnut Cabinet For above tuners. Specify finish. Size, 17" w. x 7¾" d. x 7" h. Wt., 11 lbs. Net Each.. $24.00

ACRO STEREO, HI-FI KITS

MODEL M-100 STEREO PREAMPLIFIER KIT

Modular construction with printed circuit board adds to the versatility of this preamplifier. DC on tube heaters provides hum-free operation. Mike dub switch permits mike to be mixed with one channel for announcing. Both scratch and rumble filters provided for playback of old or worn recordings. **Inputs:** Magnetic cartridge, two each channel for turntable and changer (Equalized 78, LP, RIAA); crystal and ceramic may also be used and equalized on magnetic input; tape head, one each channel (Equalized NAB); tuner; FM-AM; FM; FM-Multiplex; tape input, high level; input/monitor switch; microphone. **Sensitivity:** Low level phono and changer, 5 mv; high level phono and changer, 30 mv (for 1.5 v. output); tape head, 2 mv. **Outputs:** Five; two main, two tape and third channel. **Controls:** Input and Equalization Selector (Tape Head, FM-AM, FM, FM-Multiplex, Aux 78, LP, RIAA1, RIAA2); Channel A Bass; Channel A Treble; Channel B Bass; Channel B Treble; Balance; Ganged Volume/Loudness; Output Selector (Check A, Check B, Stereo, Stereo-Reverse, Monophonic AB, Monophonic A, Monophonic B); Phase (Normal, Reverse); Mike Dub Switch; Loudness Switch (In, Out); Tape Input/Monitor Switch; Two switched and Two unswitched AC outlets. **Tubes:** 4-7199, premium low-noise pentode/triodes. **Size:** 12¾" w. x 6½" d. x 4¾" h.
Acro Model M-100 Stereo Preamp Kit—Net Each.... $69.50

STEREO 20-20

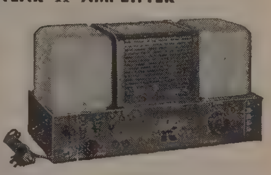


Two-channel basic stereophonic amplifier. **Power Output:** 18 watts per channel, 36 watts total paralleled output, 72 watts peak. **Distortion:** 1.5% IM at 18 watts per channel. **Controls:** Level, one each channel; Stereo; On/Off. **Outputs:** 4, 8, 16, 32 ohms (2, 4, 8, 16 ohms paralleled output). **Size:** 7" x 10" x 5½" h. Wt., 18 lbs.

Acro Model Stereo 20-20 Kit—Net Each.. $69.50

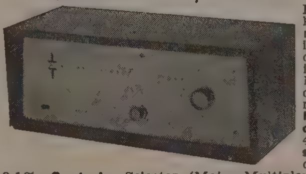
Acro Model Stereo 20 Kit—Single channel 18-watt amplifier with a performance identical to one channel of the Stereo 20-20 basic amplifier. Identical power supply, self-contained. **Size:** 7" x 7" x 5½" h. Weight, 13 lbs. Net Each........... $44.50
Acro Model Stereo 20A Kit—Same as the Stereo 20, except does not have self-contained power supply; designed to draw its power from the Stereo 20 or any other source supplying 385-475 v. DC at 120 ma, and 6.3 v. AC at 3 amps. **Size:** 7" x 5½" x 5½" h. Weight, 6 lbs. Net Each.................................. $29.50

ULTRA-LINEAR II AMPLIFIER



Ultra-linear circuitry with new feedback design for high stability performance. Meets requirements of complex speaker systems. Features an adjustable damping control; 0.5 to 15 factor for speaker match without change in volume or increased distortion. Supplied in kit form with critical wiring preassembled on printed circuit board; utilizes TO-600 transformer.
Power Output: 60 watts, 120 peak. **Distortion:** Less than 1%, IM or Harmonic (±1 db, 60 watts, 20-20,000 cps). **Frequency Response:** 1 watt, ±1 db, 5-100,000 cps; 60 watts, ±1 db, 18-30,000 cps. **Sensitivity:** 1.8 v. rms at 60 watts. **Output Impedances:** 4, 8, 16 ohms. **Hum:** 90 db below rated output. **Tubes:** 1-ECC83/12AX7, 1-ECC82/12AU7, 1-GZ34, 2-EL34/6CA7. **Finish:** Two-tone metalic brown. **Size:** 7" x 15⅛" x 8" h. Weight, 30 lbs.
Acro Model Ultra-Linear II Kit—With all components and assembly instructions. Net Each................. $79.50

STEREOPHONIC/MULTIPLEX ADAPTER

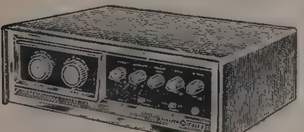


Broad-band (25-100 kc) design for maximum fidelity. Flexible controls for checking and balancing both channels. May be used to power drive amplifiers directly. **Signal-to-Noise:** 65 db **Interchannel Separation:** 45 db. **Frequency Response:** 15-30,000 cps. **Distortion:** IM, 0.1%. **Controls:** Selector (Main, Multiplex, Stereo); Balance; Power. **Inputs:** Single input connects to multiplex output of tuner; normal monophonic output left open. **Outputs:** Channel A, Channel B. On monophonic broadcasts, both A and B are fed; may be mixed if preamp permits. **Size:** 16" w. x 5½" d. x 5½" h. In ventilated metal enclosure.
Karg Model MX-1 Stereo/Multiplex Adapter—Net... $99.50
Karg Model MX-1 Panel Mounting Adapter—For 19" rack; 5¼" high Net Each $109.50
Karg Birch or Walnut Cabinet—Specify finish. Net.. 24.00

G. E. Stereo, Hi-Fi Components

"STEREO CLASSIC" AMPLIFIERS

MODEL MS-4000



Combines handsome appearance with high quality stereo features and control flexibility for individual listening preferences. Designed for stereo and monophonic discs, tapes, and broadcasts. Balance, contour and other integrated controls for easy adjustment for best stereo perspective. Features include channel reversing, speaker phasing, 40 db or better channel separation, DC preamp tube heaters to minimize hum, independent monophonic switch and phono input. Consists of dual amplifier and preamplifier units on one chassis. **Power Output:** 40 watts; two 20-watt channels. **Frequency Response:** 20-20,000 cps, ±0.5 db. **Harmonic Distortion:** Under 1% (stereo) at full rated power. **Hum and Noise:** 62 db below 20 watts on phono input. **Channel Separation:** 40 db or better. **Inputs:** Stereo cartridge, stereo tape head, monophonic cartridge (3-3.5 mv sensitivity), tuner, monophonic aux (200 mv sensitivity). **Outputs:** Dual speakers (4, 8, 16 ohms), dual output jacks; two AC outlets. **Controls:** Input Selector; Speaker Mode (Stereo/Channel Reverse/Parallel monophonic operation with stereo cartridge/Parallel monophonic operation with monophonic cartridge/Monophonic 1/Monophonic 2/Monophonic 1 and 2); Volume; Contour; Balance; Bass; Treble; Rumble Filter On-Off; Power On-Off; Speaker Phasing. **Tubes:** 12. Recessed silver-gray panel; leather-grain, willow gray vinyl cabinet (matches G.E. Model FA-12 tuner). **Size:** 15″ w. x 12″ d. x 5⅛″ h. Shipping Weight, 32 lbs.

Model MS-4000—Net Each.......................... $\$179^{95}$

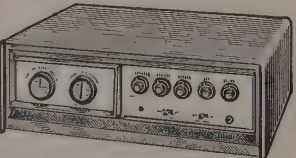
Model MS-4010—Saddle brown vinyl. Net Each.....**$179.85**

MODEL MS-2000

Similar to Model MS-4000 but has lower output, only 11 tubes, and does not include speaker phasing switch. **Power Output:** 28 watts (two 14-watt channels). **Frequency Response:** 20-20,000 cps, ±0.5 db. **Harmonic Distortion:** Under 1% (stereo) at full rated power. **Hum and Noise:** 55 db below rated output on phono, unweighted. **Channel Separation:** Better than 40 db, 30-20,000 cps. All other physical and electronic specifications similar to those of Model MS-4000.

Model MS-2000—Net Each.......................... $\$139^{95}$

MODEL G-7700



Features recessed control panels and compact cabinetry, matching the companion AM-FM tuners. Dual concentric bass and treble controls; friction split type to permit individual channel adjustment of bass and treble tones. Other controls are single knob ganged type for easy, simultaneous adjustment on both stereophonic channels. Amplifier features highly effective, versatile channel balance controls and contour controls for a smooth, gradual bass boost over a wide frequency range without an apparent change in the sound intensity level. **Power Output:** 56 watts; two 28-watt channels, music power ratings. **Frequency Response:** 20-20,000 cps, ±0.5 db. **Harmonic Distortion:** Below 1% (Stereo) at full rated power. **Hum and Noise:** 68 db below 28 watts on phono input, unweighted; 79 db below 28 watts on high level input, referred to rated input. **Channel Separation:** 40 db, minimum, between 100 and 20,000 cps. **Inputs:** (2) Stereo cartridge (accommodate magnetic cartridges, sensitivity, 4.5 mv); monophonic cartridge (sensitivity 4.5 mv); (2) stereo tape head (NAB standard, 3 mv sensitivity); (2) tuner (with screwdriver control accessible through front panel, adaptable for stereo-multiplex broadcast programs and ceramic stereophonic and monophonic cartridges, 250K ohms, 200 mv sensitivity); (2) auxiliary stereophonic (500K ohms, 200 mv sensitivity). **Outputs:** Dual speakers, 4, 8, and 16 ohms; dual output jacks, less than 20K ohms; two AC outlets, one switch controlled. **Controls:** Input Selector; Speaker Mode (Stereo Channel Reverse, Stereo Normal, Parallel, Monophonic, Channels 1 and 2, Channel 1, Channel 2); Loudness; Contour; Balance; Bass; Treble; Rumble Filter On-Off; Scratch Filter On-Off/Loudness Control; Power On-Off; Speaker Phasing. **Tubes:** 12. Beige cabinet with recessed front panel. **Power Required:** 117 v. AC, 60 cps; with AC line fuse. **Size:** 15″ w. x 12″ d. x 5⅛″ h. (with feet). Shipping Weight, 35 lbs.

Model G-7700—Beige Case, matching tuner Model FA-15. Net Each.......................... $\$189^{95}$

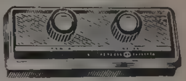
Model G-7710—Same as above, only has white case, matching tuner Model FA-16. Net Each........... $\$189^{95}$

MODEL G-7600

Similar in appearance and design to Model G-7700, except for output and color of case. **Power Output:** 40 watts, 20 watts per channel stereophonic operation, music power rating. **Hum and Noise:** 65 db below 20 watts on phono, unweighted; 76 db below 20 watts on high level input. **Controls:** Similar to G-7700; but does not include speaker phasing switch or scratch filter. **Tubes:** 11. **Power Required:** 117 v. AC, 60 cps. **Size:** 15″ w. x 12″ d. x 5⅛″ h. Shipping Weight, 35 lbs.

Model G-7600—Saddle brown vinyl case. Net Each. $\$139^{95}$

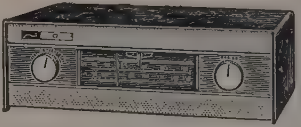
NEW "STEREO CLASSIC" MODEL RG-1000 STEREOPHONIC HI-FI REMOTE CONTROL



Matches Models MS-4000 and MS-2000 stereo amplifiers. For convenient and effective adjustment of stereo perspective from the listening point. Two knobs for adjustment of both channel balance and volume. Also may be used as a volume control with a monophonic amplifier and as a volume and balance control with a pair of monophonic amplifiers set up for stereo or monophonic reproduction. **Size:** 5½″ w. x 2¼″ d. x 1⅜″ h. **Finish:** Ebony with a textured aluminum faceplate and chrome trim. Weight, 12 oz. Control cord, 30 ft. long.

Model RG-1000—Net Each.......................... $\$14^{95}$

NEW FM-AM TUNER



Features high sensitivity, precision tuning. Receives weak signals with minimum distortion. Has unusually low hum and noise level. Includes FM multiplex jack. Tuning meter for precise tuning. **Sensitivity:** FM, 2.5 μv on 300-ohm input for 20 db quieting; AM, 200 μv/meter for 20 db s/n ratio. **FM Drift:** Negligible with AFC; remains tuned accurately during warm-up. **Distortion:** IM, less than 2%; harmonic, 1½% maximum at rated output. **Frequency Response:** FM, within ±2 db of FCC standard de-emphasis curve; AM, 25 db down at 10 kc for interference suppression. **Noise:** FM, 55 db below 100% modulation at 1 v. output; AM, 45 db below 100% modulation. **Inputs:** FM, folded dipole antenna and 300 ohm terminals; AM, built-in ferrite rod antenna and external antenna terminals. **Outputs:** Three low-impedance cathode-follower, high level, low level and multiplex. **Controls:** Tuning; Selector (Off, AM, FM, FM-AFC); Tuning Meter. **Size:** 15½″ w. x 10⅛″ d. x 5⅛″ h.

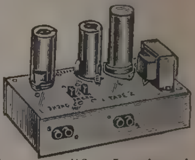
Model FA-12—Willow gray finish. Net Each........ $\$129^{95}$

Model FA-15—Beige finish. Net Each...............**$129.95**

Model FA-16—White finish. Net Each.............. **129.95**

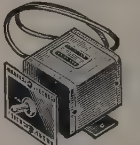
Model FA-17—Saddle brown finish. Net Each....... **129.95**

NEW MODEL MF-1 "STEREO CLASSIC" PREAMP



For use with magnetic stereo cartridges, for conversion of existing ceramic cartridge stereo systems where the necessary preamplification is not available. Also equipped for use with stereo tape heads. Provides two stages of preamplification in each channel and feedback type circuit equalization for discs (RIAA) and tape (NAB), for very low distortion. May be used as a stereo headphone amplifier; with minor circuit modification, as a high gain, monaural or stereo tape recorder mike preamplifier. Low impedance (less than 10K ohms at 1 kc) allows the use of an output cable up to 50 feet long.

Model MF-1—Net Each.......................... $\$24^{95}$

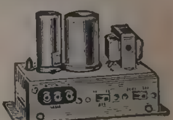


A1-903 RUMBLE FILTER

Completely eliminates unwanted 50 cps or lower signals in any audio system using a standard G.E. Variable Reluctance Cartridge. Operates with an on/off switch. Completely self-contained unit; no separate power supply or tubes required. Shielded output lead 19″ long; connected between the pick-up and preamplification stage. **Size:** 3″ w. x 3½″ d. x 2⅜″ h Mounting bracket supplied, 3″ wide.

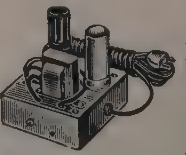
Model A1-903—Rumble Filter...... $\$8^{50}$

A1-203 "TRANSIST-TUBE" PREAMPLIFIER



Matches all magnetic phono cartridges and low-Z mikes. RIAA equalization. Built-in power supply. **Hum:** −52 db at rated output. **Gain:** 1 v. output from 10 mv cartridge. 3 inputs; 2 input switches. **Size:** 3¾″ sq. x 6″ long.

Model A1-203—
Net Each................. $\$21^{95}$



DUAL FUNCTION PREAMPLIFIER

Two-position switch provides proper equalization for mike or G.E. magnetic phono cartridge. **Gain:** Phono, 32 db; Mike, flat 30-15,000 cps. 18 db bass boost at 50 cps. Completely shielded; for use on 110-120 v. AC. Complete with phono-mike input jack, output plug, shielded cable with plug (up to 25′ of output cable can be used), one 6SC7 tube and a selenium rectifier. **Size:** 3⅝″ x 3⅝″ x 1¼″; 3¾″ maximum overall height. Shipping Weight, 1½ lbs.

Model UPX-003B—Preamplifier. Net Each........... $\$11^{95}$

Stereo and Hi-Fi Cartridges, Arm

SONOTONE CERAMIC CARTRIDGES

NEW STEREO CARTRIDGES

SERIES 10T UNITIZED CARTRIDGE

Dual-tip stylus coupled to ceramic elements inserts in "fuse clip" mounting bracket. Wired "jack-in" terminal plug with gold plated contacts. Replacement unit same, but without bracket or terminal plug. **Response:** ±2½ db, 20-15,000 cps. **Output:** 0.5 volt. **Compliance:** 1.5 x 10^{-6} cm/dyne. **Load:** 1-5 megs. **Tracking:** 5-7 gr. **Cartridge Weight:** 2.8 gr. **Channel Isolation:** 18 db. **Stylus:** Dual jewel tips, 0.7-mil and 3-mil. **Mounting Dimensions:** 7/16" and ½" centers.

10T Cartridges		10T Replacement Needles	
Model	**Net Each**	**Model**	**Net Each**
10T2-S*	$3.87	N10T2-S*	$3.57
10T2-SD†	9.90	N10T2-SD†	9.60
10T2-S77‡	3.87	N10T2-S77‡	3.57
10T2-SD77§	9.90	N10T2-SD77§	9.60

*0.7-mil and 3-mil sapphires. †0.7-mil diamond and 3-mil sapphire. ‡Two 0.7-mil sapphires. §0.7-mil diamond and sapphire.

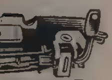
SERIES 8TA STEREO CARTRIDGES

Response: 20-15,000 cps smooth with gradual rolloff beyond. **Output:** 0.3 v. **Compliance:** 3.0 x 10^{-6} cm/dyne. **Recommended Load:** 1-5 megs. **Tracking Pressure:** 3-4 grams. **Cartridge Weight:** 7.5 grams. **Channel Isolation:** 20 db. **Stylus:** Dual jewel tips, 0.7-mil microgroove and 3-mil 78 rpm. **Mounting Dimensions:** 7/16" and ½" centers.

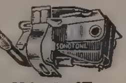
8TA Cartridges		8TA Replacement Needles	
Model	**Net Each**	**Model**	**Net Each**
8TA4-S*	$ 8.70	N-8TA-S*	$ 2.10
8TA4-S77†	8.70	N-8TA-S77†	2.10
8TA4-SD‡	11.70	N-8TA-SD‡	7.50
8TA4-D§	17.70	N-8TA-D§	11.40

*0.7-mil and 3-mil sapphires. †Two 0.7-mil sapphires. ‡0.7-mil diamond and 3-mil sapphire. §0.7-mil and 3-mil diamonds.

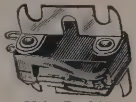
MONOPHONIC CARTRIDGES



MODEL 3T



MODEL 2T



MODEL 1P

SERIES "3" SUPER-FIDELITY CARTRIDGES

Eliminates need for a preamplifier. **Frequency Response:** Flat 20-15,000 cps with smooth, gradual roll-off to 20,000 cps. Free from hidden resonance within this range. **Compliance:** 2.0 microcentimeters per dyne or better. **Tracking:** Only 4-6 grams on microgroove records. **Output Voltage:** 0.5 v. on microgroove records at average recording level (5.5 cm/sec). **Internal Capacitance:** 490 μμf. **Recommended Load:** 1-5 megohms. **Cartridge Weight:** 12 grams. **Housing:** Die-cast with grounding tab for complete shielding; dull jet black and rich gold color. Mounts on ½" or ⅝" centers. **Model 3P**—Single needle with 1-mil or 3-mil needle. **Model 3T**—Dual needle turnover cartridge.

MODEL 1P HI-FIDELITY CERAMIC CARTRIDGE

This ceramic cartridge features high compliance and an extended frequency response. Available in two versions—one for fine groove records (33's and 45's) and the other for standard groove records (78's). **Response:** ±3 db, 30-15,000 cps. **Compliance:** 1.0 x 10^{-6} cm/dyne. **Output Voltage:** 1.0 volt (microgroove). **Tracking Force:** 8-10 grams. **Unit Capacitance:** 440 μμf. **Recommended Load:** 1-5 megs. **Cartridge Weight:** 4.5 grams. **Mounting Dimensions:** ½" and ⅝" centers.

MODEL 2T CERAMIC TURNOVER CARTRIDGE

Two streamlined versions of the Sonotone 3T "Turnover" for playing all three record speeds with one cartridge. The 2T will replace the Sonotone "9980". The 2T-LB (the 2T less brackets) fits in the popular, very narrow, tone arms, including those with pressure-fit mounting. These two cartridges are particularly recommended for modernizing older phono sets. **Frequency Range:** ±3 db, 30-15,000 cps. **Output Voltage:** 1.0 volt. **Compliance:** 1.0 x 10^{-6} cm/dyne. **Recommended Load:** 1-5 megs. **Tracking Force:** 8-10 grams. **Cartridge Weight:** 5.5 grams. **Needle:** .001" diamond or sapphire for microgroove; .003" diamond or sapphire for 78 rpm.

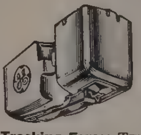
MONOPHONIC CARTRIDGE, NEEDLE PRICES

Cartrid[illegible]		Replacement Needles		
Model	**Net Each**	**Model**	**Description**	**Net Each**
1P-1S	$ 4.50	N-1P-1S	1-mil sapphire	$ 1.50
1P-2S	4.50	N-1P-2S	2-mil sapphire	1.50
1P-3S	4.50	N-1P-3S	3-mil sapphire	1.50
1P-1D	9.90	N-1P-1D	1-mil diamond	6.00
1P-3D	9.90	N-1P-3D	3-mil diamond	6.00
2T-S	5.10	N-2T-S	Dual sapphire	2.10
2T-SD	10.50	N-2T-SD	Sapphire-diamond	6.90
2T-D	16.80	N-2T-D	Dual diamond	10.80
3P-1S	6.30	N-3P-1S	1-mil sapphire	1.80
3P-3S	6.30	N-3P-3S	3-mil sapphire	1.80
3P-1D	10.50	N-3P-1D	1-mil diamond	6.60
3P-3D	10.50	N-3P-3D	3-mil diamond	6.60
3T-S	7.50	N-3T-S	Dual sapphire	2.10
3T-SD	11.10	N-3T-SD	Sapphire-diamond	7.20
3T-D	17.40	N-3T-D	Dual diamond	11.10

G.E. STEREO CARTRIDGES, ARM

STEREO VARIABLE RELUCTANCE CARTRIDGES

NEW VR-22 STEREO CARTRIDGE



Natural response, flat ±3 db from 20-20,000 cps for VR-225 and 20-17,000 cps for VR-227. Up to 30 db separation between channels for effective stereophonic reproduction. Damping block assembly enhances tracking ability. Triple shielding of Mu-Metal minimizes possible hum pickup. Channel output is within 1 db at 1000 cps; closely balanced over the entire frequency range. Inductance, 420 millihenries, nominal; resistance, 1600 ohms per channel, nominal; load, 47K ohms, optimum. **Tracking Force:** Two to four grams for VR-225 (in professional tone arm); five to seven grams for VR-227 in changer. **Frequency Response:** 20-20,000 cps for VR-225; 20-17,000 cps for VR-227. **Output:** Six mv (nominal), at stylus velocity of 5 cm/sec. **Mounting:** For 7/16" or ½" mounting centers.

Model VR-225—For professional tone arms, .0005" diamond. Net Each.................................... $27.95

Model VR-227—For changers, .0007" diamond. Net Each.................................... $24.95

"GOLDEN CLASSIC" AND "STEREO CLASSIC"

The high quality reproduction resulting from magnetic variable reluctance design is even more pronounced in stereophonic cartridges. Stereo-disc recordings require extremely high lateral and vertical compliance low record and stylus wear, low intermodulation and harmonic distortion; highly effective separation between the dual stereo signals. **Tracking Force:** GC-5, 2 to 4 grams; GC-7 and CL-7, 3.5 to 7 grams. **Frequency Response:** GC-5, 20 to 20,000 cycles; GC-7 and CL-7, 20 to 17,000 cycles. **Output:** 6 mv (nominal) per channel at 5.5 cm/sec stylus velocity. Highly flexible ground strap design allows these cartridges to be used with either three-wire or four-wire stereo systems. Double mu-metal shield also may be grounded with a separate wire. Similar in all design respects except "Golden Classics" have .7 and .5 mil diamond styli, the "Stereo Classic" has .7 mil synthetic sapphire stylus. Weight, 4 oz.

Model GC-5 "Golden Classic"—With .5 mil diamond stylus. Net Each.................................... $26.95

Model GC-7 "Golden Classic"—With .7 mil diamond stylus. Net Each.................................... $23.95

Model CL-7 "Stereo Classic"—With .7 mil sapphire stylus. Net Each.................................... $16.95

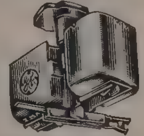
Model ST5D—.5 mil replacement diamond stylus. Net Each.................................... $11.95

Model ST7D—.7 mil replacement diamond stylus. Net Each.................................... $9.95

Model ST7S—.7 mil replacement sapphire stylus. Net Each.................................... $2.50

VR-II VARIABLE RELUCTANCE CARTRIDGES

WITH CLIP-IN-TIP STYLI



Features improved tracking ability, electrostatic shielding, plug-in terminals, and new slim design. Easily replaceable clip-in-tip styli for extra convenience. Available in single or triple play models. Mu metal shielding, special anti-hum coils eliminate unwanted signals. **Tracking Pressure:** 4 grams on professional tone arms; 6-8 grams on changer arms for reduced record wear. **Frequency Response:** 20-20,000 cps. **Output:** 22 mv nominal at 10 cm/sec. **Equalization:** 6.2 K for RIAA. **Mounting:** Either ½" or 7/16". Adapter required when used with G. E. A1-500 and A1-501 arm.

Model 4G-050—Triple play with 1- and 3-mil sapphire styli. Net Each.................................... $9.95

Model 4G-052—Triple play with 1-mil diamond and 3-mil sapphire styli. Net Each.................................... $19.95

Model 4G-053—Triple play with 1- and 3-mil diamond styli. Net Each.................................... $30.95

Model 4G-040—Single play with 3-mil sapphire. Net...$ 7.50

Model 4G-041—Single play with 1-mil sapphire. Net... 7.50

Model 4G-063—Single play with 3-mil diamond. Net.. 17.95

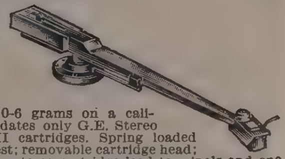
Model 4G-061—Single play with 1-mil diamond. Net.. 17.95

CLIP-IN-STYLI FOR ABOVE CARTRIDGES ONLY

G.E. No.	Sapphire	Net	G.E. No.	Diamond	Net
4G-01S	1-Mil	$2.00	4G-01D	1-Mil	$9.95
4G-02S*	2.5-Mil	2.00	4G-02D*	2.5-Mil	9.95
4G-03S	3-Mil	2.00	4G-03D	3-Mil	9.95

*For low-Z cartridge application.

"STEREO CLASSIC" MODEL TM-2G TONE ARM

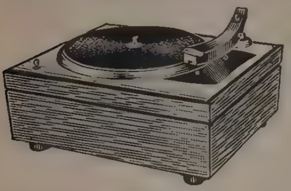


Built of strong, lightweight aluminum for minimum lateral and vertical inertia to insure minimum record and stylus wear. Cartridge pressure easily adjustable by means of sliding weight. Stylus pressure shown 0-6 grams on a calibrated scale. Accommodates only G.E. Stereo and Monophonic VR-II cartridges. Spring loaded contacts; built-in arm rest; removable cartridge head; terminal board with four stereo cartridge lead terminals and one ground terminal. For stereo and monophonic records up to 12" in diameter. Brushed aluminum and chrome finish. Weight, 1 lb. 7 oz.

Model TM-2G Tone Arm—Less cartridge. Net Each.. $29.95

FAIRCHILD Stereo, Hi-Fi Equipment

412 SERIES ELECTRONIC DRIVE TURNTABLES



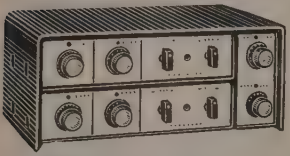
Four-speed, high fidelity turntable with a minimum of moving parts. Turntable speed depends on stable electronic circuitry, rather than noisy, temperamental friction drives, pulleys, or gears. Provision also made for varying each speed ±3%. Wow, flutter, and rumble characteristics more than meet NAB specifications, and exceed requirements for professional playback turntables. **Motor:** Hysteresis synchronous type, mounted in special shock-mounted cradle to provide equal isolation in all directions. **Drive:** Motor directly drives new type elastic belt to an intermediate two-step pulley, with a second belt from the pulley to drive the turntable itself. This provides double isolation from motor vibration. Power source for motor is unique electronic drive system that provides frequencies of 30, 60, 81, or 141 cycles, selectable by a switch. Electronic drive unit is insensitive to line voltage and frequency variations, assuring constant speed at all times. Also functions normally on either 50- or 60-cycle current. **Speeds:** 16⅔, 33⅓, 45, and 78 rpm. Vernier adjustment allows each speed to be varied ±3% if desired. **Mounting:** Extremely simple, requiring only a rectangular cutout.
Fairchild Model 412-4—Net Each.................. $\$246^{50}$

Fairchild Model 412-1—Single speed (33⅓ rpm) version of Model 412-4, less electronic drive unit. Net Each......$79.50

Fairchild Model 412-2—Same construction as 412-1, but uses belt shifting arrangement to give two-speed operation (33⅓ and 45 rpm). Not convertible to four-speed operation or to be used with electronic drive. Ideal for all records, monophonic or stereo, classical or popular. **Size:** 17⅜" w. x 12⅝" d. x 8¼" h. Weight, 20 lbs. Net Each....................................$99.50

Fairchild Model 412-BF Shock Mounted Base—Oil finished walnut, white formica top for all 12" arms. 17⅜" x 14¾" x 6¼". Net Each................................ $\$20^{00}$

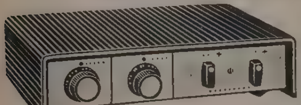
MODEL 248 STEREO PREAMPLIFIER



Consists of two Model 245 preamplifier units and a stereo control center, mounted in one unit. Completely independent control of level, bass and treble balance for each channel. Will work with stereo tape inputs from tape head (equalized for 3¾", 7½" and 15"/sec) or from radio tuner stereo sources. Has overall Loudness Control, overall Volume Control and overall Function Selector. Switches electronically to convert stereo to monophonic. **Tubes:** 4-EF86, 2-ECC83, 2-6X4 and 2 rectifiers.
Fairchild Model 248 Stereo Preamplifier—With cabinet of black anodized aluminum. Net Each...... $\$239^{50}$

Fairchild Model 247 Stereo Conversion—Consists of second 245 preamplifier with stereo control unit and cabinet for housing entire stereo preamplifier. Converts Model 245 to Model 248. Net Each..$144.50

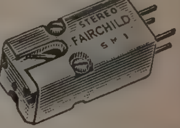
MODEL 245 PREAMPLIFIER



The most advanced, flexible, and "useworthy" preamplifier on the market; designed to serve as the control center for any high quality sound system whether binaural, monophonic or stereo. Has DC on filaments. **Frequency Response:** Essentially flat, 10-30,000 cps; unaffected by volume control. **Harmonic Distortion:** Less than 0.07% at 1 volt output. **Noise Level:** 85 db below 0.5 volt input (at high level); 78 db below 20 mv input with tone controls flat on both phono and tape. **Gain:** 60 db in phono and tape inputs at 1 kc; 18 db for high level inputs. **Inputs:** Record player, record changer, tape. **Outputs:** High impedance tape, two parallel cathode follower main output jacks. **Equalization:** RIAA and rumble filter for record changer; RIAA, flat with 500 cycle turnover, and Pop (for popular music) for 3¾ ips, 7½ ips tape heads and record player. Low loss, mica filled tube sockets used throughout. Allen Bradley volume control for long life and smooth performance. Separate bass and treble controls. Easy panel-mount design. **Tubes:** 2-EF86, 1-ECC83, 1-6X4. **Size:** 2⅞" h. x 11¹⁄₁₆" w. x 7⅛" d. **Finish:** Off-white Formica front panel with black wraparound case in Raymond Loewy design. Available with gold wraparound; white, cocoa or aqua front panels at extra cost.
Fairchild Model 245 Preamplifier—Net Each...... $\$119^{50}$

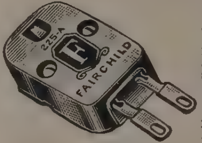
SEE OUT HI-FI EXPERTS FOR THE LATEST IN STEREO EQUIPMENT AND TECHNIQUES.

NEW MODEL SM-1 STEREO-MONO CARTRIDGE



Designed for use in changer arms. Features custom-ground rotating ball magnet, replaceable diamond stylus. **Response:** ±2 db, 20-15,000 cps. **Output:** 11.5 mv at 5 cm/sec and 1 kc. **Hum:** 65 db below signal level on turntable. **Compliance:** 4 x 10^{-6} cm/dyne. **Channel Separation:** −25 db at 1 kc; exceptional separation in 6 kc to 15 kc range. **Tracking:** 3-4 grams. **Load:** 47K ohms. Weight, 13 grams. Fits ½" or ⁷⁄₁₆" mounting centers.
Fairchild Model SM-1 Stereo-Monophonic Cartridge—With 0.6 mil diamond stylus. Net Each............... $\$34^{95}$
Fairchild Model SM-1-SR Stylus Kit—Includes 0.6 mil diamond stylus, gram gauge, screwdriver, manual in three languages (English, French, Spanish). Net Each..................$15.00

225 SERIES MONOPHONIC CARTRIDGES



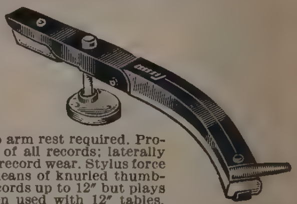
The Fairchild 225 Cartridge incorporates the famed moving-coil design, the only truly linear reproducing principle. Completely uniform response to 20,000 cps and slow roll-off beyond, giving natural sound. 4 to 6 db higher output and higher compliance than other makes. Lower moving mass, less record wear. Identify this new cartridge by its sparkling silver finish. **Output:** 5.0 mv.
Fairchild Model 225A—With 1.0 mil diamond LP stylus. Net Each.................................. $\$37^{50}$

Fairchild Model 225B—2.5 mil diamond stylus. Net...$37.50

MODEL 230 MICRO-7 MONOPHONIC CARTRIDGE

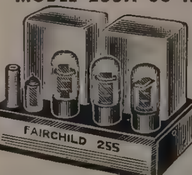
Features: High lateral and vertical compliance; air damping; low moving mass; special free-moving flexure pivot type construction. Low Q mechanical circuit practically eliminates low frequency resonances. Stylus force, 4 grams maximum recommended. Frequency response, beyond 20 kc. Output, 5 mv. Impedance, 600 ohms. No transformer needed with most preamplifiers but will work with Model 235 plug-in transformer in low gain circuits. Fits all standard arms. With 0 7 mil diamond stylus.
Fairchild Model 230 Micro-7 Cartridge—Net Each... $\$42^{50}$

MODEL 282 STEREO ARM



Takes all Fairchild cartridges as plug-in types and any other 4-pin stereo cartridge, including earlier types. Operates down to 2 grams stylus force for latest cartridges such as Model SM-1 and 230 Micro-7. Self-contained arm-locking detent; no arm rest required. Provides perfect tracking of all records; laterally balanced for minimum record wear. Stylus force easily adjustable by means of knurled thumbscrew. Designed for records up to 12" but plays records up to 16" when used with 12" tables. Spring and mass counterbalanced. Extra slide kit and 6' cables with molded plugs potted in arm post supplied with each arm.
Fairchild Model 282 Stereo Arm—Black anodized aluminum finish. Net Each................................ $\$42^{50}$
Fairchild Model 830S Slide Kit—For Model 282 Stereo arm. Net Each.. $\$4^{90}$
Fairchild Model 280A Transcription Arm—Plug-in type, with adjustments for height, leveling, stylus pressure and drop-limit. Takes any monaural variable reluctance or dynamic cartridge. For records up to 12". Net Each........... $\$37^{50}$
Fairchild Model 281A Transcription Arm—Same as Model 280A, but for 16" records. Net Each...........................$47.00
Fairchild Model 830A (Gold) 830 (Silver) Slide Kit—For Series 280 arms for other brands of cartridges. Net Each.......$4.90

MODEL 255A 30-WATT POWER AMPLIFIER



May be used as second channel amplifier to convert monophonic system to stereo, or in any other application. Excellent transient response and unusually low distortion at normal and low power operating levels. Delivers full power throughout the entire audio frequency spectrum, not only to a resistive load but also to a speaker load. Incorporates the exclusive Fairchild distortion-cancelling control, allowing you to compensate for normally unequal aging of output tubes. **Frequency Response:** 20-20,000 cps, +0, −0.5 db. **Distortion:** RMS HARMONIC: Under 0.4% at 30 watts; under 0.1% at 20 watts. INTERMODULATION (40 cycles and 7 kc mixed 4:1): Under 2% at 25 watts; under 0.5% at 30 watts. **Noise:** More than 80 db below 30 watts. **Power Output:** 30 watts. **Input:** Full 30 watt output with input of 0.7 volt. **Controls:** Master Gain; AC Balance; Test Button, 8 and 16 ohms output terminals; 100,000 ohms input phono jack; Aux. AC Outlet. **Tubes:** 1-6AB4, 1-12AU7, 2-EL34, 1-6Z34. Has fixed bias supply using selenium rectifier. **Size:** 9½" w. x 6" d. x 6¾" h. Shipping Weight, 21 lbs.
Fairchild Model 255A Power Amplifier—Net Each.. $\$124^{50}$

Cartridges, Arms, Turntables

PICKERING CARTRIDGES, ARMS AND TURNTABLE

MODEL 371 MARK II STANTON STEREO FLUXVALVE CARTRIDGE

Miniature design, fits all arms with standard ½" mounting centers with stylus force from 3 to 6 grams. Performs equally well on all microgroove records, monophonic or stereophonic sound. Two balanced signal outputs for connection to stereo preamp.; may be connected in parallel for use with conventional single-channel preamp. Frequency response, flat within 2 db from 10-30,000 cps; recommended load resistance 27,000-47,000 ohms per channel. Exclusive "magnetic-discriminator" attenuates interchannel interference by more than 20 db. Preset hum rejection circuit assures hum-free performance. Supplied with .7 mil precision-polished diamond stylus mounted in "T-Guard".

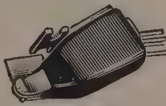
Pickering Model 371A Mark II Stereo Fluxvalve— Tracking, 2-5 grams. Net Each.................... **$26.40**

Pickering Model 371C Mark II Stereo Fluxvalve—Tracking, 3-7 grams. Net Each.................................. **$24.00**

Pickering Model D3707-A—Replacement "T-Guard" stylus assembly with .0007" diamond for Model 371A. Net Ea.. **$14.40**

Pickering Model D3707-C—Replacement "T-Guard" stylus assembly with .0007" diamond for Model 371C. Net Ea.. **$12.00**

MODEL 380 STEREO FLUXVALVE



Hermetically sealed, fully encapsulated, miniature stereophonic cartridge. Compatible for all records, stereophonic or monophonic. Fits all pickup arms, manual or automatic. Response, flat within 2 db from 20-20,000 cps. Magnetic discriminator provides channel separation of 25 db. Output, 2 mv per cm/second. Tracking force, 2-5 grams for manual arms; 3-7 grams for automatic arms. Standard 7/16"-½" mounting centers. Mu-metal shielding provides long, trouble-free life. Warranted for life, except moving parts in stylus assembly and stylus itself. Supplied with .0007" diamond stylus, instructions and hardware.

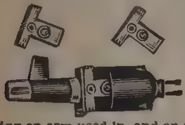
Pickering Model 380-A—Manual. Tracks at 2-5 gms. Net Each.. **$34.50**

Pickering Model 380-C—Changers. Tracks at 3-7 gms. Net Each.. **$29.85**

Pickering Model D3807-A—Replacement "V-Guard" stylus assembly for 380-A. Diamond, .0007". Net Each....... **$19.65**

Pickering Model D-3807-C—Replacement "V-Guard" stylus assembly for 380-C. Diamond, .0007". Net Each....... **$15.00**

MODEL 350 TWIN FLUXVALVE PICKUP



Provides the first flat frequency response beyond 20 kc. Tracking distortion, record and stylus wear are reduced to new low levels. Designed for use in record changers and professional arms; for record production quality control, record measurements, and critical listening applications. This dual stylus turnover model operates at 2 to 4 grams tracking force, depending on arm used in, and on the record amplitudes. Provides a very wide range. Stylus changed instantly using quick change, slip-in "T-Guard" assembly; 5 styli available. **Frequency Response:** Flat ±2 db, 20-20,000 cps. **Recommended Load Resistance:** 27,000 ohms. **Output:** 15 mv. **DC Resistance:** 3600 ohms. **Inductance:** 325 mh.

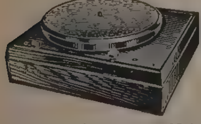
Pickering Model 350DD Fluxvalve Pickup—With .001" and .0027" diamond styli. Net Each............ **$54.00**

Pickering Model 350DS Fluxvalve Pickup—With .001" diamond and .0027" sapphire styli. Net Each.................. **$42.00**

Pickering Model 350D.5D—With .001" and .0005" diamond. Net Each.................................. **$60.00**

Pickering Model 350.5DS—With .0005" diamond and .0027" sapphire. Net Each.......................... **$48.00**

Pickering Model 350.5DO—With .0005" diamond only. Net Each.. **$42.00**

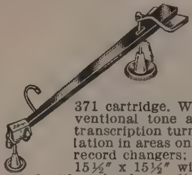


"GYROPOISE 800C" STEREOTABLE

Specially designed for monaural and stereo records from 7" to 12"; single speed only (33⅓ rpm). Offers minimum vertical rumble since only the "Gyropoise" revolves in a magnetic suspension on a bearing of air; attenuation, −12 db per octave below resonance; vertical period of spring suspension, below 5 cps. Noise is more than 65 db below reference level. Fully synchronous motor; speed accuracy ±2%. Flutter and wow are virtually eliminated by use of exclusive, new "inverted belt drive" system. Built-in precision leveling adjustment with indicator and protective foam rubber turntable mat. **Dimensions:** Turntable mechanism with tray and base, 14¾" w. x 14¾" d. x 5⅜" h.; panel, 13½" x 13½" x 5/16" thick; height above panel 1⅝", depth below, 3". Weight: Turntable mechanism, 9 lbs.; tray, 2 lbs.; base, 2 lbs.

Pickering "Gyropoise 800C" Stereotable—Chassis only. Net Each.. **$59.85**

Pickering Model 800-CB Complete Base—Mahogany, blond or walnut. Specify finish. Net Each..................... **$15.00**



MODEL 196 STANTON UNIPOISE PICKUP ARM

Unipoise arm and integrated pickup using Stereo-Fluxvalve of same design and specifications as Model 371 cartridge. Weight only a fraction of that of conventional tone arms. For use with all high quality transcription turntables; its practical size allows installation in areas only a little larger than that required for record changers; will mount on motorboard measuring 15½" x 15½" with single thumbscrew and bolt. Provided with stylus force adjustment, and arm rest with soft sable brush to keep the stylus free from dust; .7 mil diamond in "T-Guard" assembly.

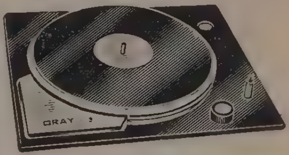
Pickering Model 196.7D Unipoise Pickup Arm—With integrated Stereo-Fluxvalve Pickup. Net Each....... **$49.50**

Pickering Model 194-D Monophonic Arm with Fluxvalve Pickup—Similar to Model 196. Specify 1-mil diamond or 2.7-mil diamond stylus. Net Each.............................. **$59.85**

Pickering Model 194.5D—With ½-mil diamond. Net.. **65.85**

GRAY HIGH FIDELITY EQUIPMENT

MODEL 33H TURNTABLE



Only turntable especially made for stereo. Best for standard records, too. Smooth and silent response. Top-quality hysteresis-synchronous motor, special shock mounts, and shock-absorbing flexible belt result in concert hall response. Single speed design eliminates linkages and other mechanical components normally used to obtain more than one turntable speed. Electrical connections and cables are provided for stereophonic disc reproduction. The aluminum turntable is provided with a center steel shaft rotating in a super-oilite bearing with end thrust. **Motor:** Hysteresis-synchronous. **Speed:** 33⅓ rpm. **Rumble and Wow:** Betters NAB disc reproducing system requirements. **Control:** Rotary switch knob. **Size:** 16" w. x 14⅜" d. **Turntable and Mounting Space Required:** Below mounting plate, 3"; above mounting plate (with 212 Tone Arm), 2⅝". Mounting plate, ⅛" thick steel. Line cord, 8 ft. **Power Requirement:** 20 watts, 117 volts, 60 cycles. Weight, 16¾ lbs.

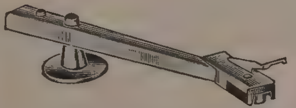
Gray Model 33H Turntable—Net Each............ **$79.95**

Gray Model HSK-33 Turntable Kit –Easy to assemble kit version of Model 33-H. Net Each............... **$49.50**

Gray Model TBA Base—For HSK-33; specify mahogany, walnut, or blond formica. Net Each............ **$17.95**

Gray Model TBA—Unfinished base. Net Each........ **$10.95**

MODEL 212 VISCOUS DAMPED ARM



Makes even the oldest of records sound better. Dual viscous-damping on both vertical and horizontal pivots plus complete static balance guarantees maximum tracking stability and more natural sound reproduction. Features single hole mounting; slide-in cartridge plugs accept all popular cartridges. Stylus force adjustable from 0 to 15 grams; adjustable stylus height over 1" range; permanently adjusted counterbalance. Viscous damping on both pivots is sealed. Plays all records up to 12" in dia. Length, 13" overall; rear over-hang 3⅝"; overall height 1½" above record surface. Weight, 1 lb., 4 oz.

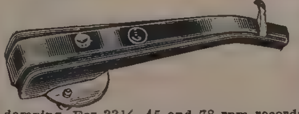
Gray Model 212 Tone Arm—Net Each............. **$34.00**

Gray Model 216 Tone Arm—Same as above, but 16" size for better tracking. Net Each................. **$36.50**

Gray Model SAK-12 Kit—Kit version of Model 212. Net **$23.95**

Gray Model SPS—Additional slide assemblies for tone arms. Net Each.. **$4.60**

MODEL 108C VISCOUS DAMPED ARM



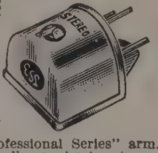
Viscous-Damped Hi-Fi tone arm. Handsome, lightweight magnesium case with rigid base assembly. **Manually operated setting for automatic adjustment of viscosity to govern** damping. For 33⅓, 45 and 78 rpm records up to 16" diameter. **Slide-in cartridge feature**—comes with three removable cartridge slides (G.E. 7 gr., Pickering 7 gr., and Fairchild 7 gr.). Shipped in "Satin Black" finish with brushed aluminum fittings.

Gray Model 108-C Tone Arm—Net Each........... **$39.95**

Stereo Hi-Fi Cartridges, Arms

ELECTRO-SONIC LABS CARTRIDGES, DUST BRUSH AND ARM

NEW GYRO/JEWEL, STEREO CARTRIDGE



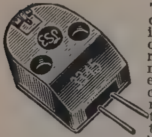
Electrodynamic unit for the perfectionist has inherently linear response by use of two subminiature D'Arsonval movements. Unique coupling uses four precious gem pivots for frictionless, long life. **Frequency Response:** ±2 db, 20-20,000 cps with response beyond 20,000 cps. **Voltage Output:** 2 mv per channel at 10 cm/sec. **Output Impedance:** Extra low; 25 ohms at 1 kc. **Stylus Force:** 2-4 grams recommended. **Compliance:** 5×10^{-6} cm/dyne both vertical and lateral. **Other Features:** Two models fit standard arms and ESL "Professional Series" arm. Three-terminal output. Both models normally require two transformers listed separately below.

ESL-C-100 Gyro/Jewel—For standard arms. Net Ea... $69.95

ESL-P-100 "Professional Series" Gyro/Jewel—For "Professional Series" arms. Net Each.......................... $79.95

ESL-TM 100 Transformers—Net Per Pair............ 15.00

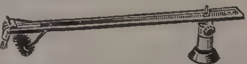
C-60 CARTRIDGE



The successor to the well-known ESL Concert Series cartridge. Provides listening at its best with greater clarity and true reproduction of instruments and voices. Features reduced hiss, precision styli, simplicity of mounting, highest lateral compliance and extremely low effective mass. A greatly increased output, together with an improved mechanical design, eliminates the need for transformers or other accessories. IM distortion is held below 0.5%; transient response is extraordinary; noise, hum, rumble and needle talk are negligible. Magnetic attraction to a steel turntable is minimized. **Response:** ±1 db, 16-30,000 cps. **Dynamic Mass:** .001 gram. **Vertical Stylus Force:** 2-4 grams. **Output Impedance:** 40 ohms. **Output Voltage:** 9 mv at 10 cm/sec.

ESL-C-60 Cartridge—Specify .001" or .003" stylus. Net Each.......................... $39.50

"DUST BUG"



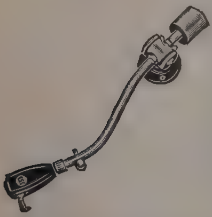
Ingenious invention eliminates dust, lint and static on records, while playing. Tiny nylon brush loosens dirt; cylindrical pad picks it up. Special, harmless cleaning fluid on pad retards static build-up; comes in replaceable applicator. Unit attaches to motorboard without screws.

ESL "Dust Bug"—Complete with fluid. Net Each...... $5.75

ESL Changer "Dust Bug"—Same as above but for attachment on record-changer arm. Net Each............ $4.75

Replacement Fluid Supply—In dispenser. Net Each.... $1.25

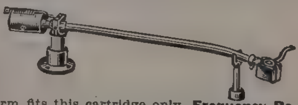
NEW GYRO/BALANCE STEREO ARM



Dramatic new arm design is the only true stereo arm engineered for all stereo pickups. Uses ball bearings throughout for all vertical and horizontal motions to assure smoother operation, increased record life and trouble-free performance. Can not damage stereo discs that may easily be ruined by using normal monaural arms. With a high quality cartridge, this arm will track properly at 2 grams. Unusual curved structure permits the arm to track on tilted turntables up to 90° without error. Tracking error, ±1°. Arm length, 12 5/16" overall. Pre-wired for stereo applications.

ESL Model S1000 Gyro/Balance Stereo Arm—Net Each.......................... $34.95

"PROFESSIONAL SERIES" ARM AND CARTRIDGE



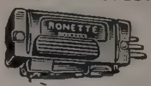
Offers perfect reproduction for broadcast, recording and lab use. Uses "Professional Series" cartridge utilizing same principles as other ESL cartridges. Precision machined, ball-bearing arm fits this cartridge only. **Frequency Response:** 16-30,000 cps. **IM Distortion:** Immeasurable. **Compliance:** 6.8×10^{-6} cm/dyne. **Dynamic Mass:** .001 gram. **Vertical Stylus Force:** 1-3 grams. **Output Voltage:** ESL-P1, 2 mv at 10 cm/sec; ESL-P60, 12 mv at 10 cm/sec. **Output Impedance:** ESL-P1, 1.5 ohms; ESL-P60, 40 ohms.

ESL-S310 "Professional" Stereo Arm—Wired for stereo, less cartridge. Net Each.................. $57.00

ESL-P1 or **ESL-P60-1** (.001), **ESL-P2.5** or **ESL-P60-2.5** (.0025), or **ESL-P3** or **ESL-P60-3** (.003)—"Professional Series" Cartridges. Specify diamond stylus desired. Net Each.. $49.50

CBS-RONETTE CARTRIDGES, STYLI

NEW "BINOFLUID" STEREOPHONIC CARTRIDGES



Outperforms majority of existing monaural cartridges. Compatible with all monaural records. Frequency response, 20 to beyond 15,000 cps. Built-in RIAA equalization. Full-channel separation, 24-28 db. Stylus pressure, 4-8 grams for true tracking and clean reproduction. High compliance dual elements, 3.5×10^{-5} cm/dyne, extend life of LP recordings. Complete with instructions, universal mounting bracket, and shielded wiring harness.

Ronette Model BF-40 Cartridge—With sapphire stylus. Net Each.......................... $7.10

Ronette Model BF-40 Cartridge—Diamond stylus. Net $10.80

"FONOFLUID" ARM AND "BINOFLUID" CARTRIDGE

Similar to "Fonofluid" turnover pickups except has no turnover knobs. Factory equipped with new "Binofluid" BF-40 stereo cartridge.

Ronette Model FF-2-BFS—12" arm with sapphire cartridge. Net Each.......................... $12.50

Ronette Model FF-2-BFD—12" arm with diamond cartridge. Net Each.......................... $16.20

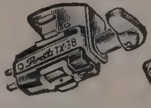
Ronette Model FF-6-BFS—16" arm with sapphire cartridge. Net Each.......................... $14.15

Ronette Model FF-6-BFD—16" arm with diamond cartridge. Net Each.......................... $17.85

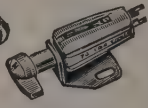
REPLACEMENT STYLI

Mil	Stylus	Application	Net Each
.75	Sapphire	Stereo and LP play	$0.65
.75	Diamond	Stereo and LP play	4.00
1.0	Sapphire	LP play	.65
1.0	Diamond	LP play	4.00
2.5	Sapphire	78 rpm recordings	.65
3.0	Sapphire	78 rpm recordings	.65

TO-400



TX-88



TO-284

RA-284

TX-88 SUPERFLUID® HI-FI CARTRIDGES

Designed for extended frequency range, improved response, less wear, and lower mass. New crystal design provides frequency range of 30-24,000 cps; straight line response from new ortho records eliminates need for equalizer. Utilizes "Stylomatic" high compliance stylus assembly that snaps onto the cartridge easily, quickly.

Ronette Model TX-88 Cartridge—With diamond LP stylus. Net Each.......................... $12.50

Ronette Model TX-88 Cartridge—With sapphire stylus. Net Each.......................... $7.50

"Stylomatic" Diamond Stylus—Specify 1.0 (microgroove) or 2.5 (78 rpm) mil needle. Net Each........... $5.00

"Stylomatic" Sapphire Stylus—Specify 1.0 or 2.5 mil needle. Net Each.......................... $1.83

WIDE-RANGE REPLACEMENT CARTRIDGES

These cartridges hold intermodulation distortion to less than 1% and require lower stylus pressures. Four series of cartridges, in four types; type is indicated as a suffix to model numbers in table below. **Series TO-284**—General replacement type; with built-in turnover mechanism; ½" mounting centers; two non-interacting sapphire styli (available with 1 mil diamond). **Series TO-400**—For record changers with very narrow tone arms, such as 1956 V-M automatic changers, in which tone arm acts as bearing for cartridge shaft. Front mounting; only hardware needed is knob, spring and set screw for knob. Brackets are not required. **Series RA-284**—Single stylus cartridges for original and replacement use in RCA-Crescent 45-rpm changers and in manual tone arms. With 1 mil (33/45 rpm) or 2 mil (33/45/78 rpm) stylus. **Series DT-60**—For automatic changers with turnover mechanism built into arm.

Each of the preceding Series can be had in the following types: **Type "P"**—Lowest IM distortion; 2-4 grams stylus pressure; relatively low output; wide range. May be used as constant velocity device with 120K ohm load and preamplifier as replacement for magnetic cartridges or with conventional crystal cartridge circuits without preamplifier. No hum or turntable pull. **Type "OV"**—High quality type; relatively low output; wide range; low IM distortion; 4-6 grams stylus pressure; built-in bass boost. Designed for three-tube (including rectifier) amplifiers. **Type 222** and **Type 395**—5-volt output; wide range; 8-10 grams stylus pressure. Clean, clear reproduction for one- and two-tube amplifiers.

Ronette No.	Volts	Net	Ronette No.	Volts	Net
TO-284-P	0.4	$5.40	RA-284-P	0.4	$4.35
TO-284-OV	0.8	5.40	RA-284-OV	0.8	4.35
TO-222*	3.0	5.40	RA-395†	3.0	4.35
TO-400-P	0.4	5.40	DT-60-P	0.4	5.04
TO-400-OV	0.8	5.40	DT-60-OV	0.8	5.04
TO-400-222	3.0	5.40	DT-60-222	3.0	5.04

*Series TO-284 high output model. †Series RA-284 high output model.

Sapphire Needles—1, 2 or 2.5 mil (specify). Net Each...$0.65

Diamond Needles—1 or 2.5 mil (specify). Net Each... $4.00

Rek-O-Kut Turntables, Arms, Cutters

HIGH FIDELITY PLAYBACK AND RECORDING TURNTABLES

Fig. A. N-33H Rondine Single Speed Belt-Drive Turntable—New design for 33⅓ rpm only. Driven by endless woven belt with adjustable tension for noise level control. New self-lubricating hysteresis synchronous motor. Solid cast aluminum turntable has built-in strobe disc; tapered edges for easy disc handling. Noise level, 53 db. Decorator gray and 2-tone aluminum finish, 17¾" x 16⅜" overall, 3" above deck, 4" below deck, using S-120 arm. Shpg. Wt., 17 lbs.
Model N-33H—Net Each........................ $69.95

Fig. B. K-33 Single Speed Belt-Drive Turntable Kit—Economy kit assembles in 30 minutes with ordinary tools. Drive is endless woven belt with adjustable tension for noise level control; 4-pole induction motor. Solid cast aluminum turntable with built-in strobe disc. Single (33⅓ rpm) speed only. Noise level, −47 db. Finish and mtg. space as above, except 5" below deck.
Model K-33—Net Each........................ $39.95
Model K-33H Kit—Same as above, but with hysteresis motor; noise level −52 db; 4" below deck. Net Each... $49.95

Fig. C. Model B-12H Rondine Deluxe 3-Speed Turntable—The finest of Rek-O-Kut's 12-inch turntables. Hysteresis synchronous motor assures smoothest possible operation, virtually eliminating wow, rumble and flutter. Single selector knob with "Off" position next to each of the three speeds—no need to turn through other speeds to turn off turntable. Noise level more than 57 db below average recording level. Permanently affixed strobe disc for instant speed check. Built-in retracting 45 rpm hub requires no external adapter. Cast aluminum deck permits mounting in most phono cabinets; pre-drilled and tapped to accommodate Rek-O-Kut S-120 arm. Jewel light indicates On-Off. Silvertone aluminum finish, 17¾" x 16" overall, 3" above deck, 6¼" below. Shipping Weight, 20 lbs.
Model B-12H—Deluxe Rondine. Net Each....... $129.95
Model B-12—3-Speed Turntable same as above but has 4-pole induction motor and noise level is 50 db below average recording level. Net Each........................ $84.95

Fig. D. B-12GH Rondine 3-Speed Turntable—Same as Model B-12H but with new, self-lubricating hysteresis synchronous motor. Noise level, 53 db; 4¾" below deck.
Net Each........................ $99.95

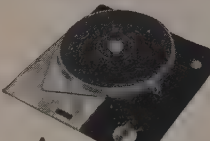
Fig. E. Model CVS-12 Continuously Variable Speed 12" Turntable—Any speed 20 to 100 rpm's, 50 or 60 cycles. Ideal for areas of fluctuating power, or with portable power plant. 16" x 12" overall, 1½" above deck, 5" below. Shpg. Wt., 15 lbs.
Model CVS-12—Net Each........................ $89.95
Model C-43-V—Case for CVS-12. Net Each.......... $24.95

Fig. F. Model B-16H 3-Speed, 16" Transcription Turntable—Designed for the three popular recording speeds. **Noise Level:** 50 db below average recording level. **Turntable:** Cast aluminum, lathe-turned, sub-mounted in base. **Motor:** Hysteresis Synchronous. Meets NAB standard for speed variation and wow content, instantaneous speed change. Accelerates to 78 rpm in ¾ turn; to 45 and 33⅓ rpm in ¼ turn. Gray wrinkle finish. 18¾" x 20" overall, 1½" high above board, 6½" below. Shipping Weight, 34 lbs.
Model B-16H—Net Each........................ $250.00

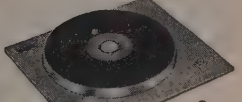
Fig. G. Model L-34 Rondine Jr. 2-Speed Turntable—33⅓ and 45 rpm speeds for currently popular recordings. 4-pole induction motor. Noise level more than 40 db below average recording level. Controlled by single slide switch that locks into position. Strobe disc and 45-rpm retracting hub built into solid cast aluminum lathe-turned turntable. Silvertone aluminum finish, 16½" x 16¼" overall, 3" above deck, 5" below. Shipping Weight, 15 lbs.
Model L-34—33⅓ and 45 rpm.
Model L-37—33⅓ and 78 rpm. Either model, Net Ea.. $59.95
Model L-34H—With hysteresis synchronous motor. Net. $79.95
Model L-37H—With hysteresis synchronous motor. Net. 79.95

Fig. H. Model R-16H 2-Speed, 16" Recording Turntable—Ruggedly constructed, precisely machined recording table with shock-mounted hysteresis synchronous motor. 33⅓ and 78 rpm speeds, with accessory idler for 45 rpm. Solid cast aluminum turntable lathe-turned for accuracy; silent neoprene idlers, plus lamitex motor pulley; self-oiling bearings; mastermatic self-locking, instantaneous speed change control. Entire assembly mounted on 18¾" x 20" radial-ribbed cast aluminum chassis, designed for flush mounting. Gray wrinkle finish. Shipping Weight, 34 lbs.
Model R-16H—Turntable, less cutting mechanism. Net Each........................ $250.00

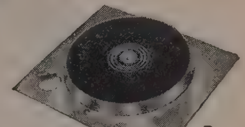
Fig. I. Model TR-43H 2-Speed 12" Recording Turntable—Similar to R-16H table above, but smaller. Features constant-speed hysteresis synchronous motor; lamitex pulley and neoprene idler; lathe-turned 12" cast aluminum turntable; self-oiling shafts. Instantaneous speed change to 33⅓ or 78 rpm; accessory 45 rpm idler may be interchanged with 33⅓ rpm. Heavy-ribbed cast aluminum chassis pre-drilled to accommodate M-12S cutting lathe (as shown in illustration). Gray wrinkle finish. 16½" x 16" overall; 1⅜" above board, 5" below. Shpg., Wt., 20 lbs.
Model TR-43H—Less cutting mechanism. Net Each. $149.95


A

B


C

E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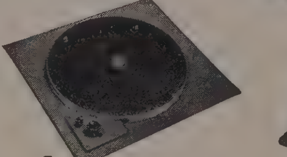
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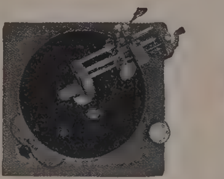
G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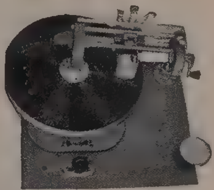

I

NEW STEREO-MONAURAL ARMS

Engineered for perfect performance. Tubular aluminum arm with die-cast cartridge shell and lathe-turned counterweight. Unique pivot design assures maximum freedom of horizontal movement; dual bearing assembly for perfect shaft alignment and stability keeps out dirt dust; assures friction-free pivot. Gimballed vertical pivot has dual ball bearings; two set screws for automatic centering. Cartridge shell accepts 3 or 4-prong stereo cartridges; plug-in with open front for location of stylus in record groove.
Model S-120—Less cartridge. Net Each.............. $27.95
Model S-160—For 16" turntables. Less cartridge. Net.. $30.95
Model PS-20—Extra 4-wire stereo shell. Net Each....... 5.95
Model PS-20L—Shell to accommodate ESL cartridge. Net. 5.95
Model SC-12 Stereo Conversion Kit—For converting a Model A-120 monaural arm to stereo. Net Each............ $17.95
Model SC-16 Stereo Conversion Kit—For converting a Model A-160 monaural arm to stereo. Net Each............ $19.95

CONSOLE CABINET

Model C-7B Studio Console Cabinet for B-16H Transcription Turntable—No screws or bolts needed. Floats on felt. Two storage compartments with piano hinges and flush ring-latches. Includes built-in electrical outlets and adjustable leveling casters. Metallic gray finish, 22" w. x 20½" d. x 33" h. Shipping Weight, 65 lbs. Net Each................ $115.00
Model C-7BT—Identical to C-7B, but with uncut ¾" motor board for any Rek-O-Kut table. Shpg. Wt., 70 lbs. Net. $124.95

RECORDING ACCESSORIES

Model M-12S Recording Lathe Only—With 120-line screw, less cutting head. Net Each................ $150.00
Model H-5 Cutter—**Impedance:** 8-15-500 ohms. **Sensitivity:** 1.8 w. @ 1,000 cycles for 6.3 cm/sec peak recorded velocity. **Frequency Response:** ±2 db, 30-13,000 cps. **Distortion:** 1.2% @ 1,000 cps. Univ. mtg. for most lathes. Stylus, short shank steel for sapphire ⅝" overall length. Net Each. $115.00
Model H-4 Cutter—Same as above, except frequency response up to 10,000. **Distortion:** 1.5% @ 1,000 cps. Net Each.... $75.00
Model ROP-12 Roll-Out Platform—For all models; stained plywood. Net Each.............................. $7.95
Model M-12S-120 or M-12S-150 Leadscrews (120- or 150-line)—Net Each.............................. $35.95
M-12S-210, -240, or -270 Microgroove Leadscrews (210, 240, or 270-line)—Net Each.............................. $44.95

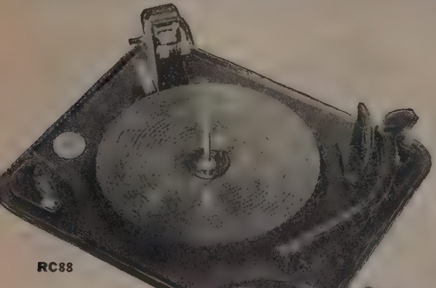
UNIVERSAL BASES

Model UW—Solid walnut. For all turntable models. Net $13.95
Model BU—Unfinished. For all turntable models. Net.. 10.95
Model LU—Unfinished. For "L" models. Net Each...... 8.95
Model KU—Unfinished. For "K" models. Net Each..... 8.95
Model X-16—Extension that permits mounting of 16" tone arm on all model bases. Net Each.............................. $6.95

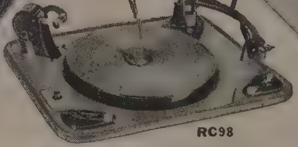
MOTOR BOARDS

Pre-cut, drilled ¾" wood; hand-rubbed, satin-finish lacquer.
Model MB-1—For Models B-12, B-12H, B-12GH. Unfinished. Net Each.............................. $2.95
Model MB-2—For Models B-12, B-12H, B-12GH. Net.. 3.95
Model ML-3—For Models L-34 and L-37. Net Each.... 8.50
Model MK-3—For Models K-33, K-33H. Net Each..... 7.95
Model MK-1—For Models K-33, K-33H. Unfinished. Net 4.95

Garrard Changers, Accessories


RC88

RC210


RC98

MODEL RC88 "TRIUMPH II" DELUXE-AUTO-MANUAL

The precision, watch-like construction of this four-speed automatic and manual player is the mark of famous Garrard engineering. Wired for stereo, this changer features constantly smooth action for the best performance for years of service. Insures positive, gentle handling of all records, regardless of size or condition of center hole. Interchangeable spindles (automatic and manual) insert quickly for added convenience. Automatic muting switch cuts noise during changing cycle. Stylus pressure adjustment knob on arm permits use with any cartridge. Comes complete with interchangeable plug-in shell; automatic spindle for 78, 33⅓ and 16 rpm records. Automatic 45 rpm spindle available; see following page. **Size:** 15½" w. x 13¼" d. x 5¾" above and 3⅞" below motor board. For 100/130 v. AC, 60 cps operation; 50 cps pulley available.

Garrard No. RC88—Less cartridge. Net Each............... $\$59^{50}$

See table below for prices with pre-installed cartridges.

MODEL RC98 "CROWN II" SUPER-AUTO-MANUAL

The greatest of all four-speed automatic and manual changers. Wired for stereo. Combines all the advancements of the famous RC88 and a plus or minus variable speed control adjustment to assure exact reproduction. Dynamically balanced rotor with four-pole shaded induction surge motor floats on rubber mounts that isolate and damp vibration and rumble. Precision, heavy steel turntable has anti-slip rubber mat. True turret drive with one-piece pulley idler system. Aluminum true-tangent tone arm has plug-in heads that take all cartridges. **Size and Power:** Same as RC88.

Garrard No. RC98—Less cartridge. Net Each.............. $\$69^{50}$

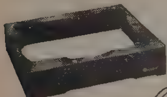
See table below for prices with pre-installed cartridges.

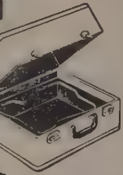
MODEL RC210 "PRIDE" DELUXE AUTO-MANUAL INTERMIX-CHANGER

Compact all-new four-speed automatic and manual intermix record changer with all the features of the popular Model RC121/II and is larger and even more attractive in appearance. Additional features include advanced "side slide" design of control lever which greatly simplifies speed selection, manual control, etc. Large, rugged levers, drives, position selectors, and gears are precision built to insure gentle, accurate handling of delicate stereo records at all times. Finished in sparkling white, chrome, and satin black. Provided with three legs mounted to the unit plate, can stand in a level position and operate without being mounted on a base. Comes complete with line cord, pick-up cables, plug-in shell, mounting hardware. Adapter spindle for automatic play of 45 rpm records is available; see following page. **Size:** 14⅞" w. x 13" d. x 5" above and 3⅛" below motor board. For operation on 100/110 v. AC, 60 cps; 50 cps pulley available.

Garrard No. RC210—Less cartridge. Net Each.............. $\$49^{50}$

See table below for prices with pre-installed cartridges.


WOOD BASE


CARRYING CASE

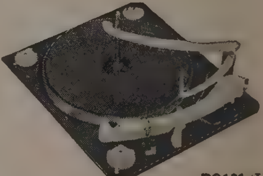
MOUNTING BOARD

MODEL RC121/II "RENOWN II" INTERMIX-CHANGER

Dual-purpose, four-speed record player has automatic intermix changing as well as manual operation. Pre-wired to play stereophonic discs. Changes 12" and 10" records in any order; or single records with the turn of a knob. Carefully designed spindle prevents double record drop. Unique stop/pause control interrupts performance at any point; then, permits restarting without losing groove position. Comes complete with plug-in shell, hardware, cable and U/L approved cord. Adapter spindle for automatic play of 45 rpm records is available; see following page. **Size:** 14½" w. x 13" d. x 5" above and 3⅛" below motor board. For operation on 100/130 v. AC, 60 cps; 50 cps pulley available.

Garrard No. RC121/II—Less cartridge. Net Each........... $\$42^{50}$

See table below for prices with pre-installed cartridges.


RC121/II

MOUNTING BOARDS AND BASES FOR CHANGERS AND PLAYERS

Deluxe units facilitate installation for all types of systems. Available in fine finishes to match your furniture or cabinetry. Solid wood construction.

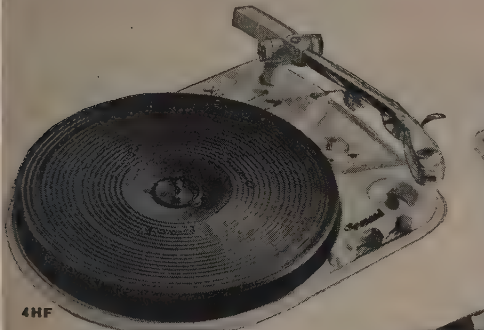
Description	Models RC88 or RC98		Model RC210		Model RC121/II		Model T/II		Model 4HF	
	No.	Net Ea.	No.	Net Ea.	No.	Net Ea.	No.	Net Ea.	No.	Net Ea.
Dark Brown Base	B8	$ 4.45	....	....	B21/II	$ 4.15	BT/II	$4.15	....	....
Mahogany Base	B8M	4.95	B10M	$ 4.95	B21/IIM	4.60	BT/IIM	4.60	B4M	$6.50
Blond Base	B8B	4.95	B10B	4.95	B21/IIB	4.60	BT/IIB	4.60	B4B	6.50
Ebony Base	B8E	4.95	B10E	4.95	....	....	....	....	B4E	6.50
Walnut Base	B8W	4.95	B10W	4.95	B21/IIW	4.60	BT/IIW	4.60	B4W	6.50
Sanded Mounting Board*	M8	2.25	M10	2.25	M21/II	2.25	MT/II	2.25	M4	2.25
Simulated Leather Portable Case‡	C8	15.00	C10	15.00	C21/II	15.00	....	....	C4†	19.50

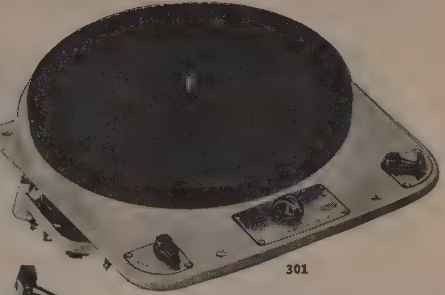
*Unfinished. †Detachable lid, black simulated leather.
‡Available with uncut mounting board; receive any unit except 4HF. Specify **Style C**—Net Each........................**$15.00**

CHANGERS AND PLAYERS WITH PRE-INSTALLED CARTRIDGES

Cartridge Description	Cart. No.	Garrard No.					
		RC88	RC98	RC210	RC121/II	T/II	4HF
Shure stereo diamond LP cartridge	M7D	$83.50	$93.50	$73.50	$66.50	$56.50	$83.50
Pickering stereo, diamond LP cartridge	371	89.35	99.35	79.35	72.35	62.35	89.35
Electro-Voice stereo turnover, diamond LP and sapphire 78	26M	79.00	89.00	69.00	62.00	52.00	79.00
General Electric stereo diamond LP cartridge	GC7	83.45	93.45	73.45	66.45	56.45	83.45
General Electric monophonic; diamond LP, sapphire 78	......	78.80	88.80	68.80	61.80	51.80	78.80
General Electric monophonic; dual sapphire LP and 78	......	68.45	78.45	58.45	51.45	41.45	68.45

Players & Accessories Garrard



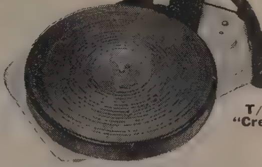


MODEL 4HF DELUXE MANUAL PLAYER

Professional-type transcription turntable with a first-class tone arm provides the finest performance with economy. Deluxe 12″ turntable is heavy-duty, balanced design; has four-speed operation with variable speed adjustment for sure accuracy. Center spindle housing has convenient pressure lubricating system to assure rumble-free, long life. Newly designed transcription-type arm has plug-in cartridge shell that accepts all standard cartridges; pre-wired for stereo or monophonic cartridges. Automatic start-stop is built into arm rest; lifting arm starts the turntable. Unique auto-trip mechanism with pushbutton control features simple disengagement; release the arm from the turntable mechanism to operate independently. Single unit plate permits quick, easy mounting in your cabinet or base. Handsome black, white and chrome styling glamorizes any installation. **Size:** 17¼″ w. x 13½″ d. x 3½″ above and 3⅜″ below motor board. For operation on 100/130 v. AC, 60 cps; 50 cps pulley available.

Garrard No. 4HF—Less cartridge. Net Each.............. **$59.50**

See table on preceding page for prices with pre-installed cartridges.



MODEL T/II "CREST" MANUAL PLAYER

New T/II version provides four speeds. Quiet, smooth shaded four-pole motor with true-turret drive eliminates hum. Automatic start and shut-off; speed selector switch. Heavy, precision steel turntable. Noiseless spindle (45 rpm adaptor supplied) and traction mat protects records. Aluminum tone arm adjustable for stylus pressure; universal shell to fit all cartridges; wired for stereo. Ready to operate; 6 ft. line cord, pickup cable with jack; U/L approved wiring. **Size:** 14¾″ w. x 12½″ d. x 3″ above and 2^1⁄$_{16}$″ below motor board.

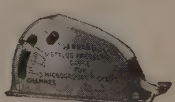
Garrard No. T/II—Less cartridge. Net Each............ **$32.50**

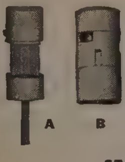
See table on preceding page for prices with pre-installed cartridges.

STYLUS PRESSURE GAUGE

A highly sensitive, yet inexpensive instrument that measures stylus pressure of pickups. Scientifically calibrated with large easy-to-read markings at 1-gram intervals. Precision construction of lightweight alloy, completely sealed. Red and white plastic case.

Garrard No. PG—Net Each.. **$2.50**



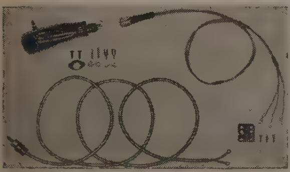


AUTOMATIC 45 RPM CHANGER SPINDLES

Garrard No. 45S8 (Fig. A)—Permits automatic play of 45 rpm records on Garrard RC88 or RC98 changers. Carefully engineered to receive wide center-hole records without damage to record. Net Each............. **$3.80**

Garrard No. 45S21/II (Fig. B)—Same careful engineering as for above unit; designed for use with Garrard RC121/II and RC210. Not interchangeable with RC121. Net Each.... **$3.80**

STEREO CONVERSION KITS



Designed for late model Garrard changers and manual players. Permits conversion of the leads from monophonic to stereo in a matter of minutes without soldering. Included is a female connector, audio cable, stereo shell, all necessary hardware and complete instructions. Can be used with most standard stereo or monophonic cartridges without further modification.

Garrard No. SCK-1—Converts Garrard RC88, RC98, RC121 and Model T/II to stereo. Net Each............ **$4.95**

Garrard No. SCK-2—For conversion of Garrard RC121/II to stereo operation. Net Each....... **$4.95**

MODEL 301 "PROFESSIONAL" TURNTABLE

The supreme unit in its class for professional quality; sets the standards for transcription machines for the industry. Features variable eddy-current speed control for each speed (33⅓, 45 and 78 rpm). Dynamically balanced 12″ turntable is precision machined of heavy 6 lb. cast aluminum. Heavy-duty motor is four-pole shaded design specifically engineered for this machine. Dynamically balanced armature set into permanently accurate, self-centering, self-lubricating phosphor bronze bushings. Motor mount is free-floating and fully isolated; motor is suspended by counter-balancing tension springs to eliminate any vibration. Noiseless main spindle rotates on single, semi-elliptical bearing of phosphor bronze. Built-in pressure lubricating system in oversized grease housing insures continuous lubrication at all times. Resistor-condenser network eliminates all shut-off noise. Pulleys and rubber interwheel mount on ball bearings. Heavy unit plate is die-cast aluminum. **Wow:** Less than 0.2%. **Flutter:** Below 0.05%. **Rumble:** Virtually non-existent. **Power Required:** 100-130 and 200-250 v. AC, 60 cps; pulley for 50 cps available. **Size:** 13¾″ w. x 16″ d. x 2½″ above and 3½″ below motor board. Comes complete with manual, stroboscope and inspection report listing all performance characteristics for your particular machine. Weight: Net, 16 lbs. Shipping, 20 lbs.

Garrard No. 301 "Professional" Turntable—Net Each......... **$89.00**

Garrard No. 3M (Mahogany), 3B (Blond), 3E (Ebony), or 3W (Walnut)—Wood base for turntable. Net Each......... **$8.95**

Garrard No. M301—Sanded, unfinished two-piece mounting board for turntable and 12″ or 16″ arm. With spirit level indicator. Finishes and installs easily. Net Each........................ **$7.50**

Garrard No. B301E (Ebony), B301M (Mahogany) or B301W (Walnut)—Two-piece base with room for 12″ or 16″ arm. Has spirit level and adjustable feet for accurate leveling. Net Each..... **$24.00**

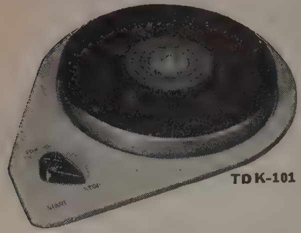
MODEL TPA/12 STEREO TRANSCRIPTION ARM

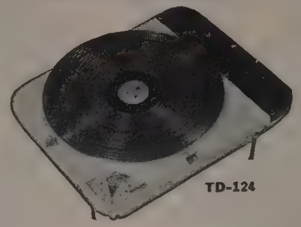
Capable of playing all types and sizes of records. Precision engineered with fixed tracking angle; completely wired for stereo or monophonic operation. Static balanced, spring loaded and chronometer type bearings assure maximum vertical freedom and minimum traverse friction. Weight is fully adjustable. Interchangeable plug-in heads accept all standard cartridges. Simple, one-hole installation. Chrome and white finish.

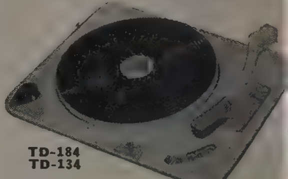
Garrard No. TPA/12—With mounting hardware. Net Each.. **$19.50**

Turntables,Changers,Arms,Cartridge

THORENS TURNTABLES, RECORD CHANGERS, PLAYERS AND ACCESSORIES


TDK-101


TD-124


TD-184
TD-134

CD-43NS

TDK-101 TURNTABLE KIT

Precision-crafted Thorens transcription turntable in kit form. May be quickly assembled with common tools. Same precision machining as on higher priced Thorens turntables. Single speed, 33⅓ rpm; ultra-compliant belt, plus extra-large idler provides complete motor isolation and constant speed operation. Speed adjustable, ±3% (a total of about one musical semitone) while record is playing. Built-in strobe disc. Idler is automatically disengaged when unit is switched off. Drive mechanism completely enclosed, with no external "string" belts or belt shields. Operates on 115 v. AC, 60 cps (50 cps adapter available).

Thorens Model TDK-101 Kit—Net Each.................... $47.50

TD-124 TURNTABLE

Meets the most critical broadcast standards with lowest wow, flutter and rumble content. Unique design incorporates extra-heavy turntable for smooth performance, yet stops and starts instantly. **Features:** Thorens "Roto-Drive" adjustment of all 4 speeds. Built-in stroboscope has neon bulb. Uses 12" or 16" arm mounting boards (available in various finishes at low cost) for easy installation of tone-arm. Built-in spirit level and four precision-machined leveling knobs. Cueing clutch for immediate speed (ideal for broadcasting or recording purposes). Single control knob for all speed changes and on-off switch. Compact design requires only 2¾" clearance below mounting board. **Turntable Drive:** Cast iron, 11½ lb., flywheel inner turntable drives lightweight, aluminum outer turntable with unique clutching unit. Design permits extra heavy weight without magnet pickup; allows continued movement of inner turntable (heavy) while outer (light) one is stopped—re-engagement provides instantaneous start. **Size:** 15½" x 12⅞" base plate. **Power Required:** 100-250 v. AC, 50/60 cps. Shipping Wt., 32 lbs.

Thorens Model TD-124—Net.. $99.75

TD-184 "DIAL-O-MATIC" PLAYER

Completely independent "Dial-O-Matic" tone arm system whereby you dial for 7", 10" or 12" records; arm automatically moves to proper position. Provides trouble-free, automatic playing of monaural or stereo records. Takes all popular cartridges. Has four-speed motor with "fine" adjustment; manual-reject switch. **Size:** Base plate, 15" x 12"; height, 3" above plate; depth, 2½" below plate. Complete with line cord, shielded cable and adapter for 45 rpm records. **Power Required:** 100-250 v. AC, 50/60 cps. Shipping Weight, 20 lbs.

Thorens Model TD-184—Net.. $75.00

TD-134 MANUAL PLAYER

Newly designed pickup arm for monaural and stereo records. Takes all popular cartridges. Manual player, similar in appearance to Model TD-184 but does not have "Dial-O-Matic" record size selector. Four-speed motor with "fine tuning" adjustment. **Size:** Base plate, 15" x 12"; height, 3" above plate; depth, 2½". Complete with line cord, shielded cable and adapter for 45 rpm records. **Power Required:** 100-250 v. AC, 50/60 cps. Shpg. Wt., 17 lbs.

Thorens Model TD-134—Net.. $59.95

CD-43NS INTERMIX CHANGER

Automatically intermixes 10" and 12" records. Special selector for 7" discs. **All** metal spindle for large hole records sold separately. Exclusive reject, repeat and adjustable pause controls. Automatic last record shut-off. Muting switch. Tone-arm tracking weight adjustment screw. Balanced heavy 12" turntable. Three-speed direct drive motor. Tone-arm most easily fits the best American cartridges. **Size:** Base plate, 15" x 12"; height 6"; depth, 3¼". **Power Required:** 100-250 v. AC, 50/60 cps. Shpg. Wt., 25 lbs.

Thorens Model CD-43NS—Net. $79.95

ACCESSORIES

FOR MODEL TDK-101 KIT

Model WBK—Wooden base. Walnut blond or mahogany finishes. Net..**$9.00**

FOR MODEL TD-124

Model WBTD—Wooden base. Walnut blond or mahogany finishes. Net..**$9.0**

Model MB-TD—Mounting board unfinished. Net Each..................**$4.5**

Model AS-12—Twelve-inch tone-ar board. Walnut, blond, black or mahogan finishes. Net Each..............**$3.0**

Model AS-16—Sixteen-inch tone-ar board. Walnut, blond, black or mahogan finishes. Net Each..............**$3.7**

FOR MODEL CD-43NS

Model MB—Mounting board. Net **$3.0**

Model WB—Wooden base. Mahogany blond finishes. Net Each.........**$6.0**

Model 45-S—Spindle for playing 45 rp recordings. Net Each............**$5.9**

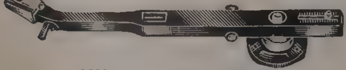
FOR MODELS TD-134 AND TD-184

Model WBX—Wooden base. Mahogan blond or walnut finishes. Net Each **$6.0**

Model MBX—Mounting board, unfi ished. Net Each.................**$4.5**

AUDAX TONE ARM KITS, ADAPTER, STYLUS BALANCE

(A DIVISION OF REK-O-KUT)



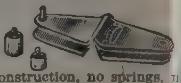
AUDAX STEREO ARM

Wired to accommodate either stereo or monaural cartridges of any make. Has only two moving parts, precision vertical and lateral pivots that give the arm remarkably free motion. Arm channel structure changes from broad to narrow width to prevent undesirable resonances. Carefully determined offset permits stylus to ride at correct tangency to record groove for minimum record and stylus wear. Cartridge shell attaches to arm by means of knurled screw; stylus to groove alignment can be made visually. One-piece arm construction, no loose parts or springs. Kit can be assembled quickly and easily with only a screwdriver.

Audax Model KT-12—12" pickup arm kit. Net Each... $15.50

Audax Model KT-16—16" pickup arm kit. Net Each....**$18.50**

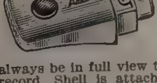
STYLUS BALANCE



A simple, balance-type instrument that accurately indicates if stylus pressure is correct, too low or too high. Works like a pharmacist's balance. Measures stylus pressure from 1 to 9 grams. It is of precision, all-metal construction, no springs, n dials to read, nothing to hold.

Audax Stylus Balance—Net Each........................ $3 9

STEREO CARTRIDGE SHELL ADAPTER

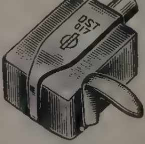


Universal adapter permits use of any stereo or monaural cartridge with monaural Audax tone arms. Comes complete with three-conductor shielded cable. Designed so that the cartridge will always be in full view to facilitate alignment of the stylus to the record. Shell is attached to the arm by means of a knurled screw.

Audax Model KTS Universal Adapter—Net Each...... $4.95

NEUMANN MODEL DST

DOUBLE DYNAMIC STEREO PLAYBACK CARTRIDG



Designed by the makers of the Neuman Teldec stereophonic cutting system, th cartridge was originally developed as a accurate means of calibrating equipme and evaluating stereophonic discs. **Fr quency Response:** ±2 db, 30-15,000 cp **Channel Separation:** 30 db in midrang more than 12 db in full range. **Source Im pedance:** 18 ohms. **Input Matching I pedance:** More than 50 ohms. **Sensitivit** 0.15 mv/cm/sec. **Compliance:** 3.6 x 10 cm/dyne. **Tracking Force:** 6.5 gran **Stylus Radius:** 0.6 mil. Swiss diamon stylus. **Size:** ¾" x 1¾" x 1⅝". Weigh 1.1 oz.

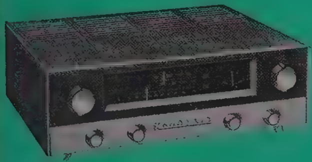
Neumann Model DST Double Dynamic Stereo Playback Cartridge—Net Each...................... $69 0

HEATHKIT

HIGH FIDELITY

a complete line of components

- amplifiers—preamplifiers
- record changers—cartridges
- tuners—am, fm, am-fm
- tape decks—two and four track



HEATHKIT PT-1

MONOPHONIC-STEREO AM-FM TUNER KIT

Outstanding in both styling and design, this 16-tube deluxe AM-FM tuner brings you the very finest in listening enjoyment. Features three printed circuit boards for easy assembly and high stability, wired, prealigned 3-tube FM tuning unit, built-in AM rod antenna, tuning meter, automatic frequency control (AFC) with on-off switch, and flywheel tuning. AM and FM circuits are separate and individually tuned, making it ideal for stereo for monophonic use. FM sensitivity is 2 microvolts for 20 db of quieting. AM sensitivity is 5 microvolts for .1 volt output. A tuner you will be proud to own. Shpg. Wt. 24 lbs.

Heathkit PT-1 .... $109.95

HEATHKIT FM-4

HIGH FIDELITY FM TUNER KIT

This handsomely styled FM tuner features better than 2.5 microvolt sensitivity, automatic frequency control (AFC) with on-off switch, flywheel tuning and prewired, prealigned and pretested tuning unit. Clean chassis layout, prealigned IF transformers and assembled tuning unit makes construction simple and guarantees top performance. Flywheel tuning and new soft, evenly lighted dial scale provide smooth, effortless operation. Housed in attractive vinyl-clad steel case with gold design and trim. A multiplex adapter output is also provided. Shpg. Wt. 8 lbs.

Heathkit FM-4 .... $42.50

HEATHKIT TR-1D, E, C

PROFESSIONAL-TYPE TAPE RECORDER KITS

Precision tape mechanism complete and tested, build only the amplifier. Two circuit boards for easy assembly, and high stability. Separate record and playback heads and amplifiers for monitoring while recording. Includes sound level meter, counter, pause control, record interlock, 2 speeds 3¾ and 7½ IPS, switch-selected. Response: ±2.5 db 30-12,000 cps at 7½ IPS. NARTB equalization. Compares to $350 to $400 units. Shpg. Wt. 30 lbs.

Heathkit TR-1E: 4 track stereo playback, mono record & play	**$205.75**
Heathkit TR-1D: 2 track stereo playback, mono record & play	**$205.75**
Heathkit TR-1C: monophonic record & playback	**$193.75**
Heathkit C-TR-1D: converts TR-1D to TR-1E, 2 lbs.	**$17.95**
Heathkit C-TR-1C: converts TR-1C to TR-1D, 2 lbs.	**$23.95**

HEATHKIT RP-3

AUTOMATIC HI-FI RECORD CHANGER KIT

Clean mechanical simplicity and precision parts are combined in the RP-3 to give you turntable quality with the automatic convenience of a changer. Features include turntable pause during change cycle, muting switch, RC noise filter, automatic disengage of idler wheels when turned off, and automatic speed and record size selection. 4 speeds, 33⅓, 45, 78 RPM; manual only 16 RPM. 4 pole hum shielded motor. Wow and flutter less than 0.18% RMS. Tracking force varies less than 0.9 gram from first to tenth record. Changer base kit, stylus pressure gauge, and 45 RPM spindle included. Shpg. Wt. 19 lbs.

Heathkit RP-3 (mono), GE-VRII mag. cart.; diamond-sapphire	**$78.95**
Heathkit RP-3S (stereo-mono), Shure M7D mag. cart.; diamond	**$89.95**
Heathkit RP-3LP (mono), Fairchild mag. cart.; diamond; LP only	**$89.95**

HEATH COMPANY
BENTON HARBOR, MICHIGAN
A Subsidiary of Daystrom, Inc.

SPEAKER SYSTEMS

COAXIAL HI-FI SPEAKER

An excellent speaker for use in designing your own speaker system, the US-3 is capable of handling up to 15 watts with a frequency response of 50 to 15,000 cps. Consists of 12″ PM "woofer" with 6.8 oz. magnet and a 3″ PM "tweeter" with 1.7 oz. magnet. Built-in 2000 cps crossover. Shpg. Wt. 7 lbs.

Heathkit US-3	**$24.25**

HEATHKIT US-3

"BASIC RANGE" HI-FI SPEAKER SYSTEM KIT

An amazing performer for its size and price, the SS-2 uses an 8″ woofer and a compression-type tweeter in a specially designed enclosure for a frequency response of ±5 db from 50 to 12,000 cps. Handles up to 25 watts program material. High frequency speaker has variable level control. Built-in 1600 cps crossover network. All wood parts precut and predrilled for easy assembly. Shpg. Wt. 26 lbs.

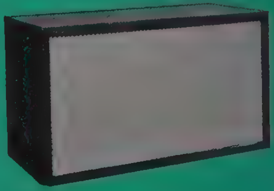
Heathkit SS-2	**$49.95**

HEATHKIT SS-2

ACOUSTIC SUSPENSION SPEAKER KIT

The Acoustic Research speaker is accepted as most praiseworthy in the world of hi-fi sound reproduction. Heathkit, sole kit licensee from AR Inc., now offers a kit version of this remarkable speaker system in money saving easy-to-build form. The 10″ Acoustic Suspension Woofer delivers clean, clear extended-range bass response and outstanding high frequency distribution is provided by specially designed "cross-fired" two-speaker tweeter assembly. Response at 10 watts input ±5 db from 42 to 14,000 cps. Impedance 8 ohms. Cabinets are preassembled and prefinished in birch or mahogany and unfinished in birch only. Shpg. Wt. 32 lbs.

Heathkit AS-2M or B (prefinished cab.)	**$97.50**
Heathkit AS-2U (unfinished cabinet)	**$85.50**



HEATHKIT AS-2U (unfinished)
AS-2M (mahog.)
AS-2B (birch)

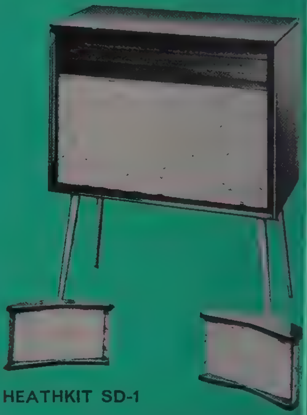
COMPLETE "PACKAGE" SYSTEM

- Complete—no "extras" to buy
- New CBS sum and difference Stereo amplifier
- "Mixed-Lows" 3-way speaker system

SUPERIOR STEREO SYSTEM KIT

Everything you need for this stereo system is provided in kit form. Cabinet, preassembled stereo record changer, stereo amplifier kit, and 3 speakers are included with complete instructions and pictorial diagrams. Overall system response is within 5 db from 30 to 16,000 cps. The amplifier separates stereo channels by utilizing sum and difference of total signal and directing to appropriate right and left channel speakers. Centrally located woofer reproduces the non-directional bass frequencies. A breathtaking experience of sound with depth and direction seldom achieved with conventional stereophonic methods. Shpg. Wt. 90 lbs.

Heathkit SD-1	**$219.95**



HEATHKIT SD-1

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harvey
radio company, inc.
103 west 43rd street · new york city

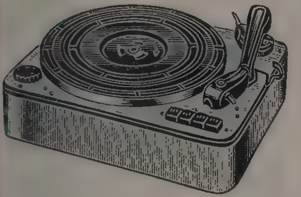
HEATHKIT®

HEATH COMPANY
BENTON HARBOR, MICHIGA
A Subsidiary of Daystrom, Inc

Stereo Changers, Cartridges

AUDIOGERSH CHANGERS, PLAYERS AND CARTRIDGES

MIRACORD XS-200 STEREO CHANGER

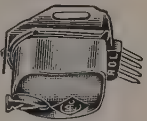


Fully automatic precision instrument plays stereo and monophonic discs. Balanced, rubber-matted 10″ turntable controlled by five push-buttons for automatic or manual use; intermixes 10″ and 12″ records in any sequence. Hum-free, heavy-duty 4-pole motor is shock mounted. Plastic tone arm on ball bearing suspension; plug-in head accepts all standard or turnover cartridges. Two spindles are provided: "Magic Wand" for automatic; manual spindle with provision for record repeat. Tone arm is adjustable. "Pausamatic" control introduces a pause between records to assure proper changing. **Speeds:** 78, 33⅓, 45 and 16⅔ rpm. **Power Required:** 110 or 220 v. AC, 60 cps; 50 cps also available. **Size:** 12½″ x 10¼″ x 2½″ above mtg. plate; 2¾″ below mtg. plate. Weight, 13¾ lbs.

Miracord XS-200—Net Each........................ $67.50

Miracord XS-200/GED Stereo—With G.E. VR-227 cartridge with 0.7 mil diamond. Net Each........................ **$91.50**

STEREOTWIN 210/D CARTRIDGE

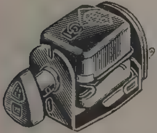


Applies moving magnet principle to stereophonic reproduction; full shielding to eliminate hum. Instantaneous stylus replacement without damage to the stylus bar. For stereophonic or monophonic record changers or manual tone arms. Adjustment for vertical and horizontal stylus positioning for changers or tone arms. **Frequency Response:** Flat over entire audio spectrum. **Output:** 13 mv/channel. **Separation:** 22 db at 1000 cps. **Tracking Force:** Manual, 3-4 grams; changer, 5-6 grams. **Stylus:** .7 mil diamond.

Stereotwin 210/D Cartridge—Net Each.............. $34.50

Stereotwin DM-210D Replacement Stylus—Net Each. **$17.50**

MIRATWIN MST-2 TURNOVER CARTRIDGES



Variable reluctance magnetic cartridge. Response: 33⅓ rpm—30-19,500 cps, ±2 db; 78 rpm—30-22, 500 cps, ±4 db. Output: (at 1 kc) 33⅓ rpm, 55 mv; 78 rpm, 45 mv. Eliminates or reduces to negligible values hum, distortion, chatter, magnetic pull.

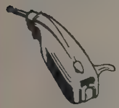
Miratwin MST-2D—Sapphire and diamond styli. Net Each... $31.50

Miratwin MST-2A—Two sapphire styli. Net Each.......... $15.00

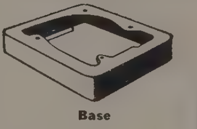
REPLACEMENT STYLI FOR MST-1, MST-2

Miratwin SN-2—Standard sapphire. Net Each..	$3.00
Miratwin SM-2—Micro-sapphire. Net Each..........	$ 5.00
Miratwin DM-2—Micro-diamond. Net Each..........	16.50
Miratwin DN-2—Standard diamond. Net Each.......	16.50

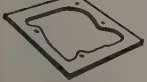
MIRACORD AND MIRAPHON ACCESSORIES



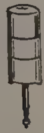
Plug-in Head



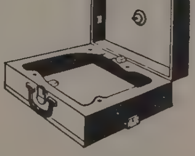
Base



Mounting Board



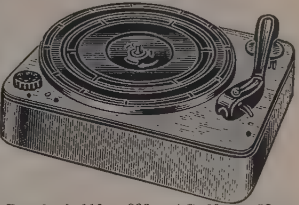
Spindle



Portable Case

Stereo Conversion Kit—For XA Miracord. Net Each..	$ 1.75
Stereo Conversion Kit—For XM Miraphon. Net Ea...	1.00
45 RPM Spindle—For XS-200; with clips. Net Each...	4.50
Plug-in Head—For XS and XMS. Net Each.........	2.50
Portable Case—For XS and XMS. Net Each.........	24.50
Mounting Board—For XS and XMS. Net Each......	2.50
Metal Base—For XS and XMS. Net Each............	5.95
Wood Base—For XS and XMS. Specify walnut or mahogany. Net Each..	$8.95

MIRAPHON XMS-210 STEREO PLAYER

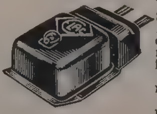


Completely wired for stereo or monophonic discs. Professional type cast turntable with special rubber mat. Rim-driven table has constant speed from 4-pole motor that is shock isolated. Plug-in head takes all standard cartridges. Arm is adjustable without use of special tools. Arm triggers automatic stop at end of record. **Speeds:** 78, 45, 33⅓ and 16⅔ rpm. **Power Required:** 110 or 220 v. AC, 60 cps; 50 cps available. **Size:** 12½″ x 10¼″ x 2½″ above mtg. plate; 2¾″ below mtg. plate. Weight, 11 lbs.

Miraphon XMS-210—Net Each.................... $47.50

Miraphon XMS-210/GED Stereo—With G.E. VR-227 cartridge with 0.7 mil diamond. Net Each..................... **$71.50**

MIRATWIN MST-1 SINGLE CARTRIDGE



Variable reluctance magnetic cartridges. Standard response: 30-22,500 cps, ±4 db. Microgroove response: 30-19,500 cps, ±2 db. Reduces hum, distortion, chatter and magnetic pull to negligible values or eliminates them completely.

Miratwin MST-1D—With diamond stylus for LP. Net Each..	$26.50
Miratwin MST-1DN—With standard diamond stylus. Net Each....	$26.50
Miratwin MST-1S—With sapphire stylus for LP. Net.	10.00
Miratwin MST-1SN—With standard sapphire styrus...	10.00

GLASER-STEERS STEREO FOUR-SPEED CHANGER, ACCESSORIES

Precision-engineered instrument designed for fully automatic playing of all stereo and monophonic records. **Stereo Features:** Double channel muting switch and RC network maintains silence for both channels. Stereo-Monophonic switch directs signal to proper speaker or speakers. Two quick-change cartridge holders supplied. Service receptacle provided for automatic amplifier shut-off. **"Speedminder":** Automatic speed selector plays intermixed 33⅓ and 45 rpm records regardless of sequence. Automatic adjust for intermixed record sizes. Plays 78 rpm records when standard groove stylus is in play position. **Record Protection:** Turntable pauses during change cycle; eliminates wear caused by record dropping on moving disc. **Acoustically Damped Arm:** Shock suspended to cut resonance, prevent vibration feedback. Finger lift permits manual operation; V-shaped cut in head simplifies placement of stylus for manual. **Safety Features:** Automatic idler disengages in "off" position to prevent flat spots. Arm may be held back or relocated on disc without damage or tripping change cycle. Automatic shutoff. **Simplified Controls:** Single knob sets all operations (automatic or manual) at 16, 33⅓, 45 and 78 rpm. Changer will operate with turntable removed to simplify servicing. **Motor:** 4-pole, hum shielded with balanced rotor; shock mounted. **Power Required:** 105-130 v. 60 cps AC; available for 50 cps AC. **Finish:** Ebony with gold trim; oyster white turntable pad. **Size:** 13½″ x 12″; 3″ below, 5″ above mounting board. Shipping Weight, 13 lbs.

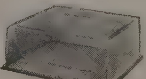
Glaser-Steers Model GS-77—Changer, less cartridge. Net Each.. $59.50

Glaser-Steers Model GSS—Automatic 45 rpm Spindle. Net Each.. **$2.95**

Glaser-Steers Model GSB—Ebony base as shown above with brass trim. Cut and drilled for changer. Size, 14¾″ w. x 13″ d. x 3½″ h. Net Each.............................. $9.60

Glaser-Steers Model GSMB—Unfinished, smooth sanded 16″ x 16″ mounting board; precut. Net Each.................... **$2.40**

CHANGER DUST COVER



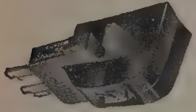
Tinted Plexiglas cover allows complete freedom of operation, yet protects changer and records during operation. Cover lined with plastic foam at bottom edge to protect furniture.

Glaser-Steers Model GSC—Net... $9.75

FOR RELATED ITEMS, REFER TO THE INDEX AT THE BACK OF THE CATALOG.

SHURE Phonograph Cartridges

STEREO CUSTOM DYNETIC CARTRIDGE



A moving-magnet cartridge designed for dependable use in record changer and transcription arms. Features clear sound reproduction and trouble-free operation. Separates disc stereo sound channels with incisive clarity; prevents cross modulation distortion. Re-creates clean lows, brilliant highs, and true-to-performance mid-range. Plays monophonic or stereophonic records. Fits 4-lead and 3-lead stereo record changer and transcription arms. **Frequency Response:** 20-15,000 cps. **Compliance:** 3.5 x 10-⁶ cms/dyne. **Channel Separation:** 20 db throughout the critical stereo frequency range. **Output Level:** 5 mv/channel at 1,000 cps. **Tracking Force:** 4-7 gm.

Model M7D—With .7 mil diamond stylus. Net Each... **$24.00**

STEREO PROFESSIONAL DYNETIC CARTRIDGE

The premium moving-magnet cartridge specially designed for critical listeners who appreciate the greatest accuracy and honesty of sound. High fidelity authorities and perfectionists have acclaimed the pre-eminent performance of the stereo Professional Dynetic Cartridge. The M3D is manufactured under precision tolerances in all performance characteristics. Plays stereophonic and monophonic records. Fits four-lead and three-lead stereo record changer and transcription arms. **Frequency Response:** 20 to 15,000 cps ± 3 db. **Tracking Force:** 3 to 6 grams. **Needle Compliance:** 4.0 x 10-⁶ cm/dyne. **Output Level:** 5 mv/channel at 1,000 cps. **Channel Separation:** More than 20 db throughout the critical stereo frequency range.

Model M3D—With .7 mil diamond stylus. Net Each.. **$45.00**

WRITE FOR INFORMATION AND PRICES ON REPLACEMENT STYLI FOR SHURE DYNETIC CARTRIDGES, REPRODUCERS.

STEREO DYNETIC PHONO REPRODUCER

Features record-protecting, scratch-proof stereo Studio Dynetic cartridge employing moving magnet within stationary coils. High permeability shield and hum-bucking coil arrangement prevent hum pickup. Also features: Incredibly light tracking of 1½ to 2½ grams; 3-second interchange of stereophonic and monophonic dynetic cartridges; 10-second stylus replacement; friction-free suspension using jewel bearings throughout, including cartridge pivot; safety control providing for remote retraction of cartridge and stylus; arm counterbalance floats on damped suspension bar for critical damping; arm is reinforced, tapered aluminum channel; stylus offset to provide proper tracking angle. **Channel Separation:** More than 20 db at 1 kc. **Frequency Response:** 20-20,000 cps, ±2½ db. **Sensitivity:** Output at 1 kc, 5 mv/channel. **Compliance:** 9 x 10-⁶ cm/dyne. **Recommended Load Impedance:** 50,000 ohms.

Model M212 Stereo Dynetic Reproducer—Arm, 11 5/16" long; for 12" records. With 0.7 mil diamond. Net Each. **$89.50**

Model M216 Stereo Dynetic Reproducer—Arm, 14¾" long; for 16" records. With 0.7 mil diamond. Net Each. **$89.50**

Model M21 Stereo Dynetic Cartridge—Net.......... **$49.50**

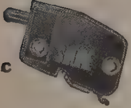
Model A29R Adapter Plate—For M212 Reproducer for mounting on Rek-O-Kut turntable. Net Each.................... **$2.40**

Model M1 Studio Dynetic Cartridge—With .0007" diamond stylus for LP records. Net Each............ **$42.00**

Model A30C Stereo Cable Assembly—Connects M212 or M216 to preamp and amplifier. Net Each............ **$1.95**

A

B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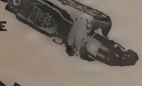
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CRYSTAL AND CERAMIC PICKUP CARTRIDGES

FINE GROOVE CARTRIDGES FOR 33-1/3, 45 RPM RECORDS

Shure Model	Fig.	Type	Output Volts	Min. Needle Force	Freq. Res. to; cps	Net Wt. Grams	Shure Needle No.	Net Each
WC20#	C	Ceramic	.58	2½-3 grams	12,000	2¼	A20S	$5.70
W21F*	B	Crystal	1.5	6 grams	10,000	4½	A63MG	5.34
W31AR	A	Crystal	2.1	7 grams	7,500	5½	A53MG	4.50

"TWIN-LEVER" CARTRIDGES FOR 33-1/3, 45 AND 78 RPM RECORDS

Shure Model	Fig.	Type	Outpt.V. MG	Outpt.V. Std.	Min. Needle Force	Freq. Res. to; cps	Net Wt. Grams	Shure Needle No.	Net Each
WC6§	H	Ceramic	.5	.7	4-6 grams	15,000	7	A6S	$ 8.70
WC6TM§	H	Ceramic	.5	.7	4-6 grams	15,000	7	A6S	8.70
W9*	J	Crystal	3.5	5.0	11 grams	10,000	7	A9	5.70
WC10§	H	Ceramic	.78	1.0	7 grams	12,000	7	A10S	5.70
WC10D§	H	Ceramic	.78	1.0	7 grams	12,000	7	A10DS	20.40

TURNOVER CARTRIDGES FOR 33-1/3, 45 AND 78 RPM RECORDS

Shure Model	Fig.	Type	Outpt.V. MG	Outpt.V. Std.	Min. Ndl. Force	Freq. Res. to; cps	Net Wt. Grams	Sh. Needle No. MG	Sh. Needle No. Std.	Net Each
W22	D	Crystal	1.2	1.4	8 gr.	10,000	4½	A65MG	A61A	$5.70
W22-T	E	Crystal	1.2	1.4	8 gr.	10,000	12½	A65MG	A61A	6.00
WC24	F	Ceramic	0.6	0.6	8 gr.	7,000	4½	A53MG	A52A	5.25
WC24-T	G	Ceramic	0.6	0.6	8 gr.	7,000	12½	A53MG	A52A	5.55
WC25	K	Ceramic	.65	.7	8 gr.	7,000	6	A65MG	A61A	5.70
W72†§	L	Crystal	3	4	10-15 gr.	5,000	7	A69A	A70A	5.10

ALL PURPOSE SINGLE NEEDLE CARTRIDGES FOR 33-1/3, 45, 78 RPM RECORDS

Shure Model	Fig.	Type	Outpt.V. MG	Outpt.V. Std.	Min. Needle Force	Freq. Res. to; cps	Net Wt. Grams	Shure Needle No.	Net Each
W26	B	Crystal	.87	1.0	8 grams	8,000	4½	A67U	$3.90
WC38	A	Ceramic	.9	.92	9 grams	10,000	5½	A58U	4.50
W66B	O	Crystal	2.0	2.3	8 grams	4,500	12	A66U	4.20
W70	P	Crystal	3.0	3.8	10-15 grams	5,000	16	A77U	2.97

STANDARD CARTRIDGES FOR 78 RPM RECORDS

Shure Model	Fig.	Type	Output Volts	Min. Needle Force	Freq. Res. to; cps	Net Wt. Grams	Shure Needle No.	Net Each
W56N**	N	Crystal	4.3	1 oz.	10,000	12	A68D	$6.00
W68†	O	Crystal	1.6	1 oz.	4,500	Dual Wt. 25 or 12	A62A	4.50
W78‡	M	Crystal	4.0 or 2.0	1 oz.	6,000	Dual Wt. 25 or 12	None	3.33

*With .453 Mount for Oak Changer.

**Cutter-Cartridge for Wilcox-Gay "Recordette." Equipped with bifurcated needle.

†Dual-Weight Cartridge. With weight-slug, net weight 25 grams. Without weight-slug, net weight 12 grams.

‡Dual-Weight Cartridge. Has same weight-slug as Model W68, with same net weight differential. In addition, Model W78 has capacitor, furnished as accessory. Without capacitor, output is 4.0 volts. With capacitor, output is 2.0 volts.

§Not a turnover type. Needles are set into tracking position by ingenious "Twin Lever" needle shift system.

#For Columbia 16⅔ Highway Hi-Fi Records.

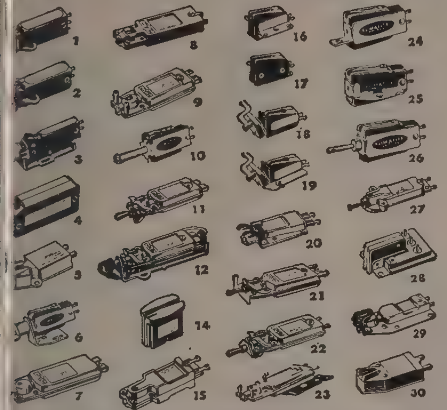
*Model W9 has Capacitor furnished as accessory. Without Capacitor output is as shown above. With Capacitor output is 1.7 v. for 33⅓, 45 rpm; 2.5 v. for 78 rpm.

†§Model W72 has a slip-on Capacitor furnished as an accessory. With the Capacitor, output is 2 volts for 78 rpm, 1.5 volts for 33⅓, 45 rpm. Without the Capacitor, output is 4 volts for 78 rpm, 3 volts for 33⅓, 45 rpm.

NOTE: Write for free Replacement Manual No. RM-58.

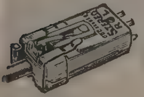
ASTATIC Phonograph Equipment

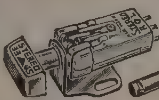
QUALITY PICKUP CARTRIDGES

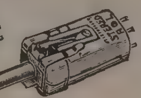


tock Numbers		Fig.	Rec. Astatic Needle	Out. V.	Needle Pres.	†	Net Each
ew	Old						
	B-2	4	N4-3*	2.5	2¾ oz.	4	$5.40
	L-26A	8	N4-3*	1.4	2¾ oz.	7	2.67
	L-40A	8	N4-3*	0.6	1¼ oz.	7	2.67
	L-12	7	N4-3*	4.0	1 oz.	3	2.67
U	L-12U	7	N4-3*	4.0- 1.25§	1 oz.	3	2.97
	16-L3	9	N4-2*	3.5	10 gr.	3	2.37
	....	9	N6-2*	3.0	10 gr.	3	1.95
	L-29	9	N4-2*	3.0	10 gr.	3	2.37
	L-70A	8	N4-3*	1.0	1¼ oz.	4	2.97
	L-72A	8	N4-3*	3.5	1¼ oz.	4	2.97
	....	15	N4-2*	3.5	12 gr.	9	2.37
	L-82A	8	N4-3*	3.5	1½ oz.	3	2.67
1	AC-J	1	A-1(J)	1.0	6 gr.	1	3.90
2	AC-AGJ	2	A-AG(J)	1.0	6 gr.	1	3.90
T	ACD-J	2	A-1(J), A-3(J)	1.0	6 gr.	2	4.17
TB	ACD-2J	3	A-1(J), A-3(J)	1.0	6 gr.	2	5.07
T	ACD-CJ	2	A-1(J), A-3(J)	0.6	6 gr.	3	5.70
TB	ACD-C-2J	3	A-1(J), A-3(J)	0.6	6 gr.	3	6.00
1	AC-RJ	1	A-1(J)	1.0	6 gr.	1	5.34
1	U-J	14	U(J)	0.5	5 gr.	6	5.70
3	U-78J	14	U-78(J)	0.5	5 gr.	6	5.70
1	51-1J	16	G(J)	0.7	8 gr.	5	4.44
2	51-2J	16	G-AG(J)	0.7	8 gr.	6	4.44
-2	53-2J	17	G-AG(J)	0.7	8 gr.	6	4.44
-T	53-TJ	18	GD(J) 2 Tips	0.7	8 gr.	5	4.77
-T	55-TJ	19	GD(J) 2 Tips	0.7	8 gr.	5	4.77
-T	57-TJ	19	N-57(J) 2 Tips	0.7	8 gr.	5	5.70
-2	59-2J	16	G-AG(J)	0.7	8 gr.	6	5.10
-2	LT4-AG	9	D-AG(J)	2.0	8 gr.	3	4.20
-1	62-1M	20	A-1(J)	3.0	10 gr.	3	2.97
-TB	LQD-1-JB	12	Q-33(J), Q(J)	1.0	8 gr.	8	6.00
-TY	LQD-1-J	11	Q-33(J), Q(J)	1.0	8 gr.	8	4.77
-TS	64TMS	21	K(J), K-78(J)	3.0	10 gr.	3	4.17
-2	66-2M	9	K-AG(J)	3.0	10 gr.	3	2.97
-3	66-3M	9	K-78(J)	3.0	10 gr.	3	2.97
-TB	66-TMB	12	K(J), K-78(J)	3.0	10 gr.	3	5.40
-TS	66-TMS	22	K(J), K-78(J)	3.0	10 gr.	3	4.35
-TY	66-TMY	11	K(J), K-78(J)	3.0	10 gr.	3	3.90

CRYSTAL STEREO CARTRIDGES


70TS


76TS-TB


74TS

igh voltage output crystal stereo cartridges for original equip-
ent, monophonic-to-stereo conversion, and direct replacement
plications. Fits all standard changers and pickups. Output,
) v. Frequency response, 50-10,000 cps. Channel separation, 20
. Needle pressure, 10 gr. Compliance, 0.7.
odel 70TS—For narrow arm changers. Net Each......**$4.35**
odel 74TS—For Astatic K-74T stereo pickup and as monophonic-
-stereo replacement for Astatic 314TS cartridge. Net. .**$4.35**
odel 76TS-TB—For all changers with ½″-7/16″ mounting centers.
et Each...**$4.77**

MODEL 8D PICKUP

or Webcor changers. Contains 40-TB cartridge; for all speeds.
odel 8D—Net Each.....................................**$8.79**

MODEL "K" SERIES PICKUP

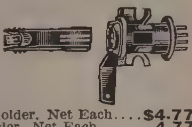
eplacement pickup with high output turnover cartridge. Mount-
g hardware and arm rest supplied. Weight, 8 oz.
odel KR-314T—Net Each...............................**$4.17**

Stock Numbers		Fig.	Rec. Astatic Needle	Out. V.	Needle Pres.	†	Net Each
New	Old						
81-T	See New "Soundflo" Hi-Fi Cartridges Listed and Illustrated below.			1.0	6 gr.	5	$2.37
81-TB				1.0	6 gr.	5	2.97
81-TX				1.0	6 gr.	5	5.97
81-TBX				1.0	6 gr.	5	6.57
89-T				1.3	6 gr.	5	2.97
89-TB				1.3	6 gr.	5	3.57
89-TX				1.3	6 gr.	5	6.57
89-TBX				1.3	6 gr.	5	7.17
106	....	23	N6-2*	3.5	10 gr.	3	2.97
118-TS‡	....	26	N8-1, N8-3	0.75	8 gr.	11	3.87
120-TS‡	....	26	N8-1, N8-3	3.0	8 gr.	10	3.87
124-TS‡	....	26	N8-1, N8-3	3.0	8 gr.	10	3.87
310-2	....	24	N8-2	3.0	8 gr.	10	2.97
310-T	....	25	N8-1, N8-3	3.0	8 gr.	10	3.27
310-TS	310-TS-TB	26	N8-1, N8-3	3.0	8 gr.	10	3.27
312-2	....	24	N8-2	0.75	8 gr.	11	3.27
312-T	....	25	N8-1, N8-3	0.75	8 gr.	11	3.27
312-TS	312-TS-TB	26	N8-1, N8-3	0.75	8 gr.	11	3.87
314-TS	....	26	N8-1, N8-3	3.0	8 gr.	10	3.27
401	401-A	27	N4-3*	1.4	2¾ oz.	7	3.57
402	402-M	28	G-78	0.7	12 gr.	1	4.77
403	403-J	5	Q(J)	0.7	10 gr.	5	6.30
405	....	11	K(J), K-78(J)	3.0	10 gr.	3	4.77
406	....	22	K(J), K-78(J)	3.0	10 gr.	3	4.77
407	....	29	N4-2	4.0	10 gr.	9	2.67
408	....	20	N10-1(J)	0.8	10 gr.	2	2.67
409	....	19	GD(J) 2 Tips	0.7	8 gr.	5	5.70
410	....	20	N11-1J, N12-3M	0.8	8 gr.	2	3.90
414-1	....	25	N8-1	3.0	8 gr.	10	2.67
414-2	....	25	N8-2	3.0	8 gr.	10	2.67
416-2	....	25	N8-2	0.75	8 gr.	11	3.27
420-TS#	....	6	N8-1, N8-3	3.0	8 gr.	10	3.27
422-TS#	....	6	N8-1, N8-3	0.75	8 gr.	11	3.57
424-TS	....	10	N8-1, N8-3	3.0	8 gr.	10	3.90
426-TS	....	10	N8-1, N8-3	3.0	8 gr.	10	4.50
430	....	30	Q(J)	0.75	18 gr.	1	4.50

#Or TB. §Output with condenser. *Needle not included. †Frequency Range: 1) 50-10,000 cps; 2) 50-6,000 cps; 3) 50-5,000 cps; 4) 50-4,000 cps; 5) 30-15,000 cps; 6) 30-10,000 cps; 7) 50-4,500 cps; 8) 50-7,000 cps; 9) 50-6,500 cps; 10) 30-11,000 cps; 11) 30-13,000 cps. ‡New subminiatures for narrow arm changers.

"SOUNDFLO" PLUG-IN STEREO CARTRIDGES

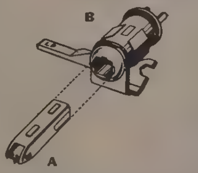
Four terminal contacts. 25 db channel separation. Two tips, either diamond or sapphire. 0.5 v. output. 20-15,000 cps response. Compliance, 2. 5-7 grams tracking force.



Model	Description	Net Each
11T7	Two .7-mil (S)	$ 4.17
13T	.7-mil(S), 3-mil(S)	4.17
13TX	.7-mil(D), 3-mil(S)	7.77

Model 11T7B—Same as 11T7 plus holder. Net Each....**$4.77**
Model 13TB—Same as 13T plus holder. Net Each...... **4.77**
Model 13TBX—Same as 13TX plus holder. Net Each... **8.37**

"SOUNDFLO" HI-FI CARTRIDGES



Wide range, ceramic cartridge-needle combinations for original equipment and direct replacement applications. Replaceable plug-in cartridge. Turn-under design with 1 mil and 3 mil tips to handle all speeds. See table, above, for further specifications and prices. Turn-under lever and mounting brackets supplied with complete units.

Model 81TB (Figs. A & B)—Complete unit. Both tips are sapphire. Black housing with white dot.
Model 81T (Fig. A)—Dual sapphire replacement cartridge for above.
Model 81TBX (Figs. A and B)—Complete unit. One diamond and one sapphire tip. Black housing with orange dot.
Model 81TX (Fig. A)—Diamond-sapphire replacement cartridge for above complete unit.
Model 89TB (Figs. A & B)—Complete unit; higher voltage output than 81 series. Dual sapphire tips. Gold housing with white dot.
Model 89T (Fig. A)—Dual sapphire cartridge for above.
Model 89TBX (Figs. A & B)—Same as 89TB, but with 1 diamond and 1 sapphire tip. Gold housing with orange dot.
Model 89TX (Fig. A)—Diamond-sapphire cartridge for above.

"SOUNDFLO" 91 AND 93 SERIES CARTRIDGES

Model	Description	Replaces*	Net Ea.
91T	One 1-mil†, one 3-mil†	Wb-A-1919, EV-76S	$2.55
91TX	One 1-mil‡, one 3-mil†	EV-76DS, Wb-A1920	7.50
93T-1	Two 1-mil†	EV-51-1	2.37
93T-2	Two 2-mil†	EV-52-2	2.37
93T-3	Two 3-mil†	EV-53-3	2.37
93T	One 1-mil†, one 3-mil†	EV-56, Z-142-80, WE-V8-1, Ad-409B28	2.37
93TX	One 1-mil‡, one 3-mil†	EV-56DS, Z-142-83 WE-V8-1D	7.50

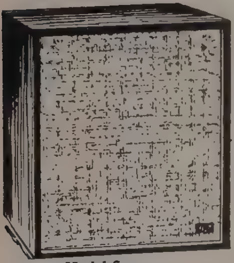
*Wb-Webcor, EV-Electro-Voice, WE-Webster Electric, Z-Zenith, Ad-Admiral. †Sapphire. ‡Diamond.

"SOUNDFLO" 83-1 SERIES CARTRIDGES

Direct replacement for RCA plug-in cartridge #105837. Used in RCA player models 9JD1, 9ED2, 93D31, 6EY3D.
Model 83-1—One 1-mil sapphire tip. Net Each.........**$2.10**
Model 83-1X—One 1-mil diamond tip. Net Each....... **7.20**

KLH Hi-Fi Speaker Systems

"...A PATIENT SEARCH FOR EXTREMELY HIGH QUALITY"

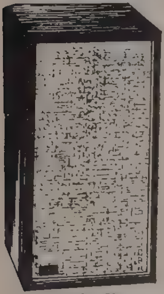

Model Seven

All KLH units are guaranteed against defective workmanship or materials for a period of two years.

NEW MODEL SEVEN 2-WAY SPEAKER SYSTEM

A more elaborate development of the features of the now-famous Model Six; incorporates an ideally smooth mid-range, sensitive deep lows and directly radiating high range speakers. In addition, the volume of the enclosure has been doubled to extend the low frequency response to maximum. Two high frequency speakers are small cone types, radiating directly for clear, sharp highs without unnecessary shrillness. The low frequency speaker is a 12" acoustic suspension type that delivers deep response without booming. The LC crossover network has provisions to increase or decrease the high frequency level 3 db. For stereo systems, two Model Sevens will completely match within ± 1.5 db. **Enclosed Volume:** 2.6 cu. ft. **Impedance:** 8 ohms. **Size:** 21½" w. x 11⅞" d. x 26¼" h. Shipping Weight, 55 lbs.

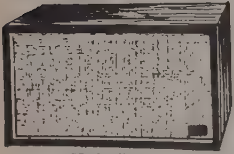
KLH Model Seven—Specify walnut or oiled walnut finish. Net Each	$203.00
KLH Model Seven—Unfinished walnut. Net Each	$198.00
KLH Model Seven—Specify mahogany or korina finish. Net Each	196.00
KLH Model Seven—Unfinished birch. Net Each	189.00


Model Six

MODEL SIX 2-WAY SPEAKER SYSTEM

For the first time, two speakers were designed together, producing a smoothness in the high and low frequencies and flawless continuity through the mid-range that were never before possible at (or near) this price level. Components include an acoustic-suspension type 12" woofer, a small cone-type direct radiator tweeter, and a LC crossover network with provisions to increase or decrease the high frequency level 3 db. Available in several finishes, the handsome modern enclosure design will fit neatly in any decor. For top stereo performance, two Model Six systems will match for perfect response within ± 1.5 db. **Enclosed Volume:** 1.3 cu. ft. **Impedance:** 8 ohms. **Size:** 12⅝" w. x 11⅞" d. x 23½" h. Shipping Weight, 36 lbs.

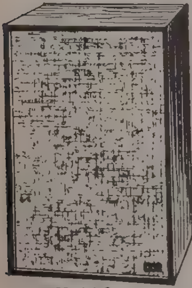
KLH Model Six—Specify walnut or oiled walnut finish. Net Each	$134.00
KLH Model Six—Specify mahogany, blond on birch, or unfinished walnut finish when ordering. Net Each	$129.00
KLH Model Six—Unfinished birch. Net Each	124.00
KLH Model Six—Unfinished fir. Net Each	119.00


Model Four

MODEL FOUR 2-WAY SPEAKER SYSTEM

Rated "Best" by a leading consumer organization. System utilizes a single 12" acoustic suspension speaker mechanism for smooth low and mid-range response. The high frequency speaker is a small cone-type direct radiator that delivers clear, sweet trebles faithfully. Independent adjustment over a range of 5 db of the level above 1,500 cps and the level above 6,000 cps is provided as a part of the LC network. Provision is also made to allow connection to the high and low frequency sections separately. Two Model Four systems are ideal for stereo applications, matching within ± 1.5 db. **Enclosed Volume:** 1.5 cu. ft. **Impedance:** 16 ohms. **Size:** 25" w. x 12" d. x 13½" h. Shipping Weight, 44 lbs.

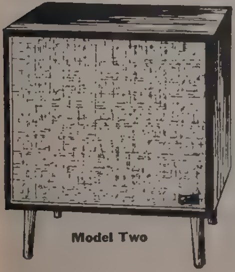
KLH Model Four—Specify mahogany or blond finish. Net Each	$224.00
KLH Model Four—Walnut finish. Net Each	$231.00
KLH Model Four—Utility. Net Each	209.00


Model One

MODEL ONE 2-WAY SPEAKER SYSTEM

Reproduces the mid-range and low frequencies with amazing faithfulness by use of two 12" acoustic speaker mechanisms connected in parallel. Each mechanism is housed in its own section, assuring smooth response without resonances or distortion. Also provided is space for mounting a high frequency speaker (speaker not supplied) for all models except "Utility". When used in stereo systems, two Model One systems will match within ± 1.5 db. **Enclosed Volume:** 2.25 cu. ft. for each 12" speaker mechanism. **Impedance:** 16 ohms. **Size:** 25" w. x 16" d. x 38" h., overall; 23½" w. x 14½" d. x 7½" h., high frequency speaker space allowed. Shipping Weight, 93 lbs.

KLH Model One—Specify mahogany or blond finish. Net Each	$378.00
KLH Model One—Walnut finish. Net Each	$390.00
KLH Model One—Utility. Without space for tweeter; 25" w. x 16" d. x 27½" h. Shipping Weight, 83 lbs. Net Each	$336.00


Model Two

MODEL TWO SINGLE SPEAKER SYSTEM

Utilizes a single 12" acoustic suspension speaker mechanism to provide clean, wide range response in the middle and low frequencies. Careful baffling and systematic engineering keep the system compact yet functional for limited space and budget high fidelity systems. Combined in stereo applications, two Model Two systems will meet the requirements of most discerning audiophiles; match within ± 1.5 db. **Enclosed Volume:** 1.5 cu. ft. **Impedance:** 16 ohms. **Size:** 25" w. x 12" d. x 21½" h., on six legs; 23½" w. x 10½" d. x 7½" h. internal space for high frequency speaker (not furnished). Shipping Weight, 54 lbs.

KLH Model Two—Specify mahogany or blond finish. Net Each	$197.00
KLH Model Two—Walnut finish. Net Each	$206.00

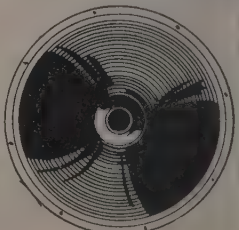
MODEL THREE SINGLE SPEAKER SYSTEM

Extra compact design (identical in appearance to Model Four), is virtually the same system as Model Two, yet meets the requirements of small apartment applications with superb sound. A single 12" acoustic suspension mechanism delivers wide range response over the middle and low frequencies without distortion or unwanted resonances. The internal volume of the system is identical to Model Two, carefully engineered to give proper baffling. In stereo applications, two of these units will match within ± 1.5 db. **Enclosed Volume:** 1.5 cu. ft. **Impedance:** 16 ohms. **Size:** 25" w. x 12" d. x 13½" h. Shipping Weight, 42 lbs.

KLH Model Three—Specify mahogany or blond finish. Net Each	$174.00
KLH Model Three—Walnut finish. Net Each	$181.00
KLH Model Three—Utility. Net Each	159.00

MODEL ZERO SPECIAL WOOFER

Since KLH makes all the parts for all KLH systems, they are able to design and produce speakers to meet any special requirements. A typical example is Model Zero, which was designed to replace a rank of 13 pipes, 16-32 ft. long, in a large concert hall organ. A special purpose, high efficiency woofer, it covers the 16-200 cps response range. **Cone Diameter:** 32"; including rim suspension, 36". **Excursion:** 2". **Magnet Weight:** 24 lbs.; magnet assembly, 65 lbs. **Write for Information about Special Speaker Ordering.**



FOR INTEGRITY IN MUSIC

"There is nothing finer than a Stromberg-Carlson"

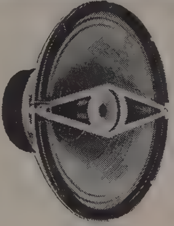
HIGH FIDELITY SPEAKERS

RF-480

RF-478

RF-482

RF-487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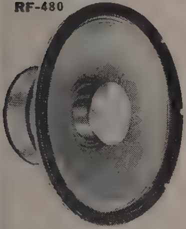
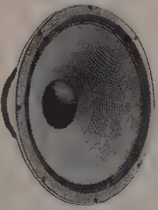
RT-476

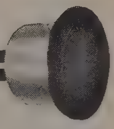

RF-484

RM-485

RW-486

RW-489


RW-490


RT-477

These outstanding high fidelity speakers are designed to bring you more faithful music and voice reproduction at the most economical cost. They incorporate skill, precision engineering and quality-control production techniques to assure adherence to Stromberg-Carlson's high standards for professional performance. Materials used in the manufacture of these precision mechanisms are carefully selected to meet the requirements of their particular purposes as well as for long, trouble-free life. Careful attention to sealing materials and similar details assures rugged dependability under most operating conditions.

Model	Power Handling Capacity Program Material (Watts)		Freq. Range (10:1 Loudness Ratio) cps	Free Air Resonance	Max. Flux Density in Magnetic Structure, Gauss		Impedance Ohms	Size, In. Dia. x L.	Net Each
	Woofer	Tweeter			Woofer	Tweeter			
RF-480	18	....	30-17,000	80 ± 5 cps	17,000	....	8	8 3/32 x 3 1/16	$ 24.95
RF-478	Over 50	Over 30	25-18,000	40 ± 5 cps	15,600	18,000	8	12¼ x 5	39.95
RF-482	Over 50	Over 30	20-18,000	25 ± 5 cps	18,000	18,000	16	12¼ x 5¼	59.95
RF-487	Over 75	Over 50	20-20,000	25 ± 5 cps	18,000	18,000	16	12¼ x 5¼	74.95
RF-483	Over 100	32	25-18,000	45 ± 5 cps	15,400	18,000	16	15⅛ x 6 23/32	99.95
RF-484	Over 100	Over 50	15-20,000	20 ± 5 cps	14,000	18,000	16	15⅛ x 6 7/32	124.95
RM-485	....	Over 50	120-11,000	60 ± 16 cps	....	16,000	16	6⅛ x 4⅛	24.95
RW-486	Over 50	....	25-11,000	40 ± 5 cps	15,600	15,600	8	12¼ x 4¾	29.95
RW-489	Over 50	....	20- 5,500	25 ± 5 cps	18,000	....	16	12¼ x 5 3/16	49.95
RW-490	Over 100	....	15- 5,000	20 ± 5 cps	14,000	....	16	15⅛ x 6¼	99.95
RT-476	....	32	800-18,000*	....	....	18,000	8	3 [illegible] x 3 1/16	9.95
RT-477	....	Over 50	800-20,000*	....	....	18,000	8	4 [illegible] x 3½	24.95

*When used with a 4,000 cps crossover network.

Stromberg-Carlson Model RX-462 Two-Way Crossover Network—Net Each **$9.95**

Stromberg-Carlson Model RX-463 Three-Way Crossover Network—Net Each **$34.95**

"ACOUSTICAL LABYRINTH®" SPEAKER SYSTEMS

Finest quarter-wave length duct loudspeaker enclosures available to maximize the low frequency performance of quality loudspeakers. Achieves a system resonance lower than unbaffled free air cone resonance of the low frequency radiator itself. Mass loading and frictional damping devices extend low frequency range of the system with extreme flatness of response. Compact in size, but retains the advantages of quarter-wave length loading. Loudspeaker, "Acoustical Labyrinth®" enclosure and built-in crossover included in system. Ready to play. Designed for installation in a wall, closet or your own cabinet. Decorator housings available.

RS-401 8" SYSTEM

"Acoustical Labyrinth®" enclosure with one RF-480 woofer and one RF-476 tweeter, set-up and prewired at factory, complete with crossover network. **Effective Frequency Range:** 10:1 average loudness ratio re: 32 sones (90 phons) 35-18,000 cps; 5:1 average loudness ratio re: 32 sones (90 phons) 55-15,000 cps. **IM Distortion:** 1.5%. **Size:** 12⅜" w. x 11⅜" d. x 17⅜" h.

Stromberg-Carlson Model RS-401 8" System—Net Each **$44.95**

RS-404 12" SYSTEM

"Acoustical Labyrinth®" enclosure with one RW-486 woofer and one RT-476 tweeter set-up and prewired at factory, complete with crossover network. **Effective Frequency Range:** 10:1 average loudness ratio re: 32 sones (90 phons) 30-20,000 cps; 5:1 average loudness ratio re: 32 sones (90 phons) 50-15,000 cps. **IM Distortion:** 1.2%. **Size:** 13⅜" w. x 12⅞" d. x 22⅞" h.

Stromberg-Carlson Model RS-404 12" System—Net. . **$54.95**

RS-405 12" SYSTEM

"Acoustical Labyrinth®" enclosure with one RW-486 woofer, one RM-485 mid-range and one RT-476 tweeter set-up and prewired at factory, complete with crossover network. **Effective Frequency Range:** 10:1 average loudness ratio re: 32 sones (90 phons) 30-20,000 cps; 5:1 average loudness ratio re: 32 sones (90 phons) 50-15,000 cps **IM Distortion:** 1.2%. **Size:** 13⅜" w. x 12⅞" d. x 22⅞" h.

Stromberg-Carlson Model RS-405 12" System—Net. . **$84.95**

RS-406 12" SYSTEM

With one RW-489 woofer, one RM-485 mid-range and one RT-477 tweeter, set-up and prewired at factory, complete with crossover network. **Effective Frequency Range:** 10:1 average loudness ratio re: 32 sones (90 phons) 30-20,000 cps; 5:1 average loudness ratio re: 32 sones (90 phons) 48-18,000 cps. **IM Distortion:** .8%. **Size:** 13⅜" w. x 12⅞" d. x 22⅞" h.

Stromberg-Carlson Model 406 12" System—Net Each **$119.95**

RS-424 15" SYSTEM

"Acoustical Labyrinth®" enclosure with one RW-490 woofer, one RW-485 mid-range and one RT-477 tweeter, set-up and prewired at factory, complete with crossover network. **Effective Frequency Range:** 10:1 average loudness ratio re: 32 sones (90 phons) 30-20,000 cps; 5:1 average loudness ratio re: 32 sones (90 phons) 40-18,000 cps. **IM Distortion:** 0.8%. **Size:** 17⅛" w. x 16" d. x 31⅜" h.

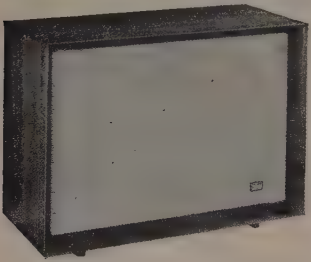
Stromberg-Carlson Model RS-424 15" System—Net. **$199.95**

"ACOUSTICAL LABYRINTH®" ENCLOSURE KITS

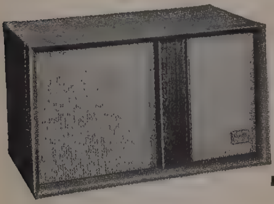
The 8", 12", and 15" "Acoustical Labyrinth®" enclosure kits are precision-cut to size, ready to assemble. Nails, glues, complete directions—everything you need is included.

Stromberg-Carlson Model LK-480—8" kit. Net Each	**$9.95**
Stromberg-Carlson Model LK-486—12" kit. Net Each	**$14.95**
Stromberg-Carlson Model LK-490—15" kit. Net Each	**19.95**

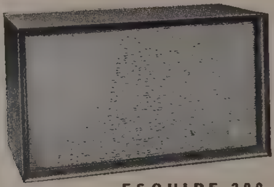
Electro-Voice LOW-RESONANCE SYSTEM



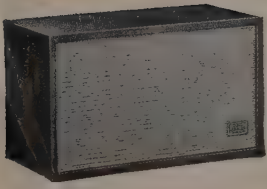
THE ROYAL 400



REGAL III



ESQUIRE 200



THE LEYTON

NEW ELECTRO-VOICE

ULTRA-COMPACT SYSTEMS DESIGNED FOR STER

Rich, contemporary styling . . . outstanding reproduction
compact in size . . . E-V's new series of low-resonance system
just right for monophonic listening, perfect for stereo.

An outstanding achievement in the design of modern furnit
this simple yet striking styling will provide the perfect accent
your room decor. All cabinets are custom-crafted of select h
wood veneers, with lustrous hand-rubbed finishes to meet the n
discriminating standards. Rigid construction of ¾" wood throu
out is completely vibration-free.

And performance . . . here is where E-V low-resonance syst
really come into their own! The specialized bass drivers use
double-flux ceramic magnets for highest efficiency. By car
adjustment of voice coil, cone weight, and complianc
engineers have developed a series of bass speakers that pro
optimum efficiency and bass-range extension . . . even the
enclosed in relatively small, sealed cabinets. All models ope
adequately with a 12-watt amplifier in smaller rooms; 20 wat
recommended for larger rooms.

The use of diffraction horns on VHF drivers in these syst
assures extended response and wide dynamic range over the gr
est possible listening area. These components assure you of
fusion to provide a complete curtain of sound, as well as ideal t
balance, so vital to authentic stereo reproduction.

The Royal 400. Phenomenal response from the most luxurious
resonance system available. One complete additional octav
bass is obtained from the special 18" woofer. For a given excur
of the cone assembly, this speaker moves 2½ times more air
equivalent 12" systems, thus giving much greater power hand
capacity and at the same time making the system capabl
radiating more power when required. Long-throw voice coils in
linear operation at highest levels of sound. Full three-way
featuring 18" woofer, 8" cone mid-range in totally isolated ca
to prevent interaction of consequence, crossing over at 350
into compression very-high frequency driver with integral dif
tion horn. Response 30 cps to 19 kc. Size 27¾" high, 25¼
15" deep. Weight 103 lbs.

System complete in Walnut, Mahogany or Limed Oak—
Net Each $24

Regal III. This system has been designed to provide the
reproduction possible in a size so modest. It employs a d
3-way system including a specially-designed 12-inch su
frequency driver with 3-pound magnet, treble driver, and
driver for an unusually flat response from 35 to 19,000 cps
level controls and an electrical crossover complete the
EIA sensitivity is 46 db. 8 ohms impedance. Available in ma
any, limed oak, or walnut. Size 12⅛" deep, 14" high, 25
Shipping Weight 32 lbs.

Enclosure and system complete—Net Each $14

Esquire 200. An economical version of the popular Rega
includes special 12" low-frequency driver which crosses ov
trically at 200 cps into a direct-radiator 8" cone driver
3500 cps. a VHF compression driver with diffraction
employed. Frequency response is 40 cps to 19 kc. 8 ohms i
ance. Size 13½" deep, 14" high, 25" wide. Weight 30 lbs.

System complete in Walnut, Mahogany or Limed Oak—
Net Each $1

System complete in unfinished Birch—Net Each 9

The Leyton. Top performance on your bookshelf from th
moderately-priced system utilizing a special 12" high-comp
low-frequency driver and matched 8" high-frequency unit
resulting low-resonance system outperforms speakers an
closures many times its size and at a considerable
Cabinet finished in hand-rubbed fine hardwood veneers in
mahogany or walnut, or available in unfinished birch for fin
to taste. Size 14⅛" high, 24" wide, 12" deep. Shipping
29 lbs.

System complete in Walnut or Mahogany—Net Each . . $8

System complete in Unfinished Birch—Net Each 7

Electro-Voice ENCLOSURES AND SYSTEMS

COMPACT EXTENDED BASS-RANGE CORNER CABINETS

Utilizing an advanced indirect horn-radiator principle, E-V design extends the lows, enhances the highs. Employs the room walls as an extension of the exponential horn air load—assures one full octave of added bass with unprecedented efficiency. Provides direct front radiation of higher frequencies; smoother, cleaner overall musical balance. Increases power handling capacity of any speaker.

The Regency. For E-V or other 15" speaker, or 2 or 3-way systems, without modifications. Has integral "built-in corner". Can be used in corner or against flat wall. Response down to 30 cps. Selected hardwood veneers. Grille in brushed brass finish. Size: 29⅝" h., 33½" w., 19" d. Shipping Weight, 90 lbs.
Mahogany Cabinet Only—Net Each..............**$130.00**
Blonde Limed Oak or Walnut Cabinet Only—Net Each **140.00**

Regency III. Includes E-V deluxe 15" 3-way system completely wired and installed in Regency enclosure. Shpg. Wt., 135 lbs.
Mahogany Complete—Net Each..................**$393.00**
Blonde Limed Oak or Walnut Complete—Net Each.. **403.00**

The Aristocrat. For E-V or any full-range 12" speaker or E-V separate 2 or 3-way systems, without modifications. Unusually smooth reproduction down to 35 cps. Selected hardwood veneers. Brushed brass grille. 29⅝" h., 19" w., 16 5/16" d. Shpg. Wt., 44 lbs.
Mahogany Cabinet Only—Net Each..............**$72.00**
Blonde Limed Oak or Walnut Cabinet Only—Net Each. **79.00**

Aristocrat III. Includes E-V deluxe 12" 3-way system completely wired and installed in Aristocrat enclosure. Shpg. Wt., 74 lbs.
Mahogany Complete—Net Each..................**$312.00**
Blonde Limed Oak or Walnut Complete—Net Each.. **319.00**

The Baronet. The finest small speaker system available. True folded-horn corner enclosure extends bass range by two full octaves. Designed for use with E-V Model SP8B 8-inch reproducer. E-V BB1 can be added for a separate 2-way system. Selected hardwood veneers. 25½" h., 16" w., 12" d. Shpg. Wt., 40 lbs.
Mahogany Cabinet only—Net Each................**$45.00**
Blonde Limed Oak or Walnut Cabinet only—Net Each. **49.00**

Baronet III. Includes Model SP8B 8" full-range coaxial loudspeaker, E-V T35B VHF driver, X36 crossover network and AT37 level control, mounted, wired and installed. Shpg. Wt., 54 lbs.
Mahogany Complete—Net Each..................**$111.50**
Blonde Limed Oak or Walnut Complete—Net Each.. **115.50**

ALONG-THE-WALL ENCLOSURES

The Marquis. This along-the-wall counterpart of the popular Aristocrat utilizes the proven principle of increased reflected speaker inductance to lower the Q of the rear air-loaded mass. The vertical parallel porting slots extend the low-frequency response range of E-V 12" speakers and separate speaker systems by nearly an octave. Efficiency below the 100-cycle point is increased by nearly 40% over that of comparably-sized bass reflex enclosures. For E-V or other 12" speakers, or 2 or 3-way system without modification. Designed for maximum along-the-wall performance. Response down to 40 cps. Selected hardwood veneers. Brushed brass grille. Shipping Weight, 50 lbs. Size: 29⅝" h., 19" w., 14½" d.
Mahogany Cabinet Only—Net Each................**$63.00**
Blonde Limed Oak or Walnut Cabinet Only—Net Each **69.00**

Marquis III. Includes E-V deluxe 12" 3-way system completely wired and installed in Marquis enclosure. Shipping Wt., 85 lbs.
Mahogany Complete—Net Each..................**$303.00**
Blonde Limed Oak or Walnut Complete—Net Each.. **309.00**

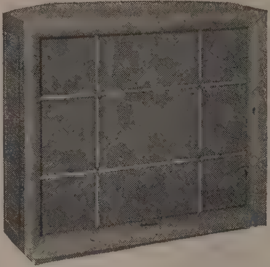
The Coronet. Diminutive Coronet is a dramatic accomplishment of true, balanced high fidelity reproduction in compact, space-saving form. In itself a complete high-fidelity speaker system, the Coronet adapts ideally to use as an economical high-quality stereo speaker system or as a complimentary second channel for other E-V full-range speaker systems. Performance in each frequency range is outstanding, balanced and distortion-free when used with E-V 8" or separate, 2-speaker systems. The low-frequency rear port extends and enhances bass response below 100 cycles for finest, small-speaker reproduction. Response: 70 cps to beyond audibility. Selected hardwood veneers, brushed brass trim. Alcohol and burn-proof top. 25" h., 9½" w., 17¾" d. Shpg. Wt., 19½ lbs.
Mahogany, Limed Oak or Walnut Cabinet Only—Net.**$35.50**

Coronet IA. Includes Model SP8B, T35B VHF driver, X36 crossover, AT37 level control, wiring harness, completely wired and installed in Coronet enclosure. Shipping Weight, 38 lbs.
Mahogany, Limed Oak or Walnut Complete—Net Ea..**$102.00**

Musicaster. Weatherproof speaker system allows you to take high fidelity outdoors. Rugged one piece aluminum die casting protects weatherproofed 8" Radax speaker and provides dual horn loading for smoothest response of any outdoor speaker. Can be mounted anywhere or used as portable speaker. Wide-angle coverage makes placement easy for stereo. Use it by the pool or patio or at the barbecue for more fun from your high-fidelity system. Response 60-13,000 cps; Impedance 8 ohms; Power handling capacity 30 watts; Dispersion 120°; 21½" x 21½" x 8½". Net Weight, 31 lbs.; Shipping Weight, 34 lbs.
System Complete—Net Each......................**$48.00**

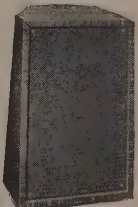
Musicaster II. Provides same features as above plus a VHF Driver to extend the range to 18,000 cps for smoother, brighter highs. Net Weight 33 lbs. Shipping Weight 36 lbs.
System Complete—Net Each......................**$69.00**

MB1 Surface Mounting Bracket. Allows mounting of any Musicaster flat against wall for neat, unobtrusive installation. Replaces standard "U" Bracket. Shipping Weight 1 lb. Net Each..**$2.70**

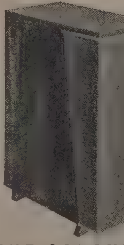

THE REGENCY

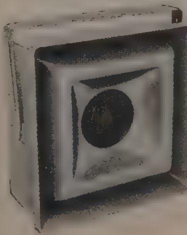
THE ARISTOCRAT

THE MARQUIS

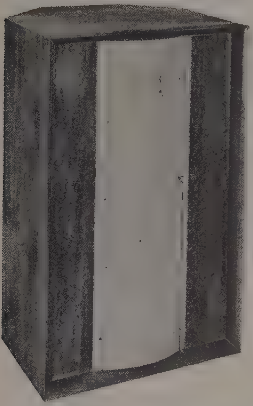

THE BARONET

THE MUSICASTER


THE CORONET



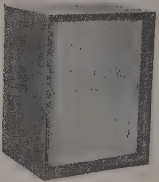
Electro-Voice HIGH FIDELITY AND STEREO SYSTEMS



PATRICIAN 700

STEREON 200

STEREON 100



STEREON 300

ESQUIRE 200 WITH TWO STEREON 300's

Patrician 700. A striking interpretation in contemporary design of the World's finest high-fidelity loudspeaker system. The Patrician 700 offers a complete 4-way speaker system in custom crafted corner cabinet for very finest in reproduction. Divides the task of reproducing the audio spectrum between four drivers each designed without compromise for distortion free fidelity. Employs 103F speaker system (Electro-Voice 30W 30-inch LF driver, 12W, horn loaded, mid-bass assembly, T250 treble driver with 8HD horn, T350 super tweeter, three AT37 level controls, X2835 4-way crossover. Crossover frequencies 200, 800 and 3500 cps).

This newly designed Patrician 700 system represents a dramatic step forward in the accomplishment of full-range reproduction. The 30-inch low-frequency speaker is capable of reproducing bass tones in the first octave of sound (20 cycles per second) with complete fidelity. The other components take over to reproduce the rest of the audible spectrum with pleasing smoothness well beyond audibility (21,000 cycles per second).

Entire system wired and installed in elegant cabinet of selected woods finished in exquisite hand-rubbed mahogany, blonde limed oak or walnut. Size 54″ h., 32″ w., 29″ d. Shpg. Wt., 350 lbs.

System Complete, Walnut, Mahogany or Limed Oak—
Net Each..**$695.00**

Stereon 200. The Stereon 200 is a complementary speaker system specifically designed to permit the economical and space saving expansion of the Patrician 700 to stereophonic reproduction. Operation of the Stereon 200 relies upon the fact that bass tones contribute nothing to the stereo effect. The unit is designed to reproduce only those sounds which are required in the second stereo channel, that is, those sounds above the bass region, 200 cps and upwards. Reproduction above this point is accomplished using the same mid-bass, treble and very-high-frequency components of the Patrician 700 (12W, T250 with 8HD and T350 units).

The bass in the second stereo channel is not wasted but is combined and correctly phased with the bass in the first channel by means of the integral crossover network and is passed to the low-frequency speaker in the full-range system.

The Stereon 200 permits convenient expansion of the Patrician 700 to stereo, effecting considerable economy in both space and cost. The Stereon 200 is the ideal "add-on" unit for expansion to derived three channel stereo making use of the Model XT1 Stereo Mixer Transformer, in combinations of either two Patricians and one Stereon or vice versa. Shipping Weight 116 lbs.

System Complete in Mahogany, Limed Oak or Walnut—
Net Each..**$375.00**

E-V STEREONS FOR 2- and 3-CHANNEL STEREO

A new kind of loudspeaker system is presented to solve the space problem for STEREO. These systems are simple, effective and low in cost.

No STEREO effect exists when listening to sounds below 300 cps since the human ear is unable to determine the directionality of such sounds. This principle is made use of in the E-V Stereon system, whereby all the BASS from both channels is properly phased and directed to one full-range speaker system through the Model XT1 mixer transformer. This makes use of the full bass capabilities of the system in supplying full bodied bass for BOTH channels. The upper range of one channel follows into the same full-range system, the mid and high range from the other channel is fed through the Stereo Mixer Transformer to the highly developed Stereon. Space for bass is not required, so here is an uncompromised second channel for stereo in a compact piece of furniture allowing greatest flexibility for best STEREO placement.

By adding a **third** speaker, the stereo area can be vastly increased and more listeners can enjoy the full dimension of stereophonic high-fidelity sound.

In two-track records and tapes the element of the third channel is present even though equally divided after recording between the two channels on the record. It exists in so called "phantom" form. This third channel can be re-formed by the use of a third speaker connected to the two amplifiers by means of the XT1 Transformer. The third channel signal actually consists of sum tones, different in phase from the two outside channels; the connection passes these tones to the central speaker which regroups them as a new set of sounds, virtually identical in character to that picked up by the central microphone during the recording. Thus, a broader plane of sound is propagated from both right and left simultaneously, allowing a closer listening position to the plane of the speakers and perfect stereo from the more distant listening positions.

Additional benefit comes in 3-channel stereo by the added realism of the completely defined curtain of sound—to the extent of solidly centering a soloist, a most difficult stereo achievement.

E-V Stereons are completely modular; start with one full-range, low-resonance E-V system (Leyton, Esquire, Regal or Royal), and add on one Stereon plus XT1 for two-channel stereo. Then expand to three channels by adding a second Stereon.

Stereon 100. For use with E-V Leyton or similar low-resonance systems. 14″ h., 10″ w., 5⅝″ d. Walnut, Mahogany or Unfinished Birch.
Enclosure and Speaker Complete—Net Each..........**$34.50**

Stereon 300. For use with E-V Esquire, Regal, Royal, or similar low-resonance systems. 14″ h., 11½″ w., 8⅜″ d. Walnut, Mahogany, Limed Oak, or Unfinished Birch.
Enclosure and System—Net Each..................**$49.50**

Model XT-1 Stereo Mixer Transformer. For use with Stereon 100 and Stereon 300. Only one required for two- or three-channel stereo system. Net Each..............................**$13.50**

Model 511 Stereo Wiring Harness. Convenient special wiring harness for hookup of three-channel stereo system (any three units plus XT-1). Harness length will cover stereo arrays up to 30 feet wide. Net Each.............................**$5.00**

Electro-Voice MULTIWAY SYSTEMS AND COMPONENTS

RECOMMENDED MULTIPLE DRIVER, EXTENDED-RANGE COMBINATIONS

omplete, ready-to-install systems; for enclosure or custom installation. All Building Block Kits include level control crossover, and iring harness. (See Building Block descriptions below.)

To Set Up System	Order These Components			As Used in
	Low-Frequency Driver	Midrange Driver	High-Frequency Driver	
Economy 12-inch (MODEL 108A)	12BW	BB3	BB1	**ARISTOCRAT, MARQUIS, KD6, KD9**
Deluxe 12-inch (MODEL 111A)	12W	BB4	BB2	**ARISTOCRAT, MARQUIS, KD6, KD9**
Economy 15-inch (MODEL 116A)	15BW	BB3	BB1	**REGENCY, KD4**
Deluxe 15-inch (MODEL 114B)	15W	BB4	BB2	**REGENCY, KD4**
Deluxe 30-inch (MODEL 103F)	30W L-F driver, 12W mid-bass assembly, T250-8HD treble driver and horn, T350 VHF driver, 3—AT37 level controls, X2835 crossover, wiring harness. Shipping Weight 99 lbs. **Order as Model 103F System**—Net Ea. **$460.00**			**PATRICIAN 700**

T250

T25A

T10A

TREBLE DRIVERS

odel T250—HF driver designed for use with maximum efficiency stems. Sens. rtg., 57 db. Power rtg., 35 watts. Response 400-,000 cps. Magnet wt. 3 lbs. Impedance 16 ohms. 5¼″ diam., ¼″ deep. Throat diam. ⅞″. Shpg. Wt. 9 lbs. Net Ea. **$81.00**

odel T25A—HF driver, 20-30 watts. Response, 400-13,000 cps. npedance, 16 ohms. Sens. rtg., 53 db. 1 lb. Alnico V magnet. ¼″ diam., 4 1/16″ deep. Throat diam., ⅞″. Shipping Weight 7 lbs. et Each.................................... **$58.00**

odel T10A—HF driver, 20 watts. Response 400-13,000 cps. npedance, 16 ohms. Sens. rtg., 51 db. ¾ lb. Alnico V magnet. ¼″ diameter, 3¼″ deep. Throat diameter, ⅞″. Shipping Weight lbs. Net Each.................................... **$42.50**

Note: Sensitivity ratings are EIA standard.

DIFFRACTION HORN, LEVEL CONTROLS

odel 8HD Diffraction Horn—Designed for crossover at 800 cps ith an appropriate crossover network such as E-V Model X8 or 825. Actual horn cutoff, 600 cps. Die-cast construction, suitable r either free standing or baffle board mounting. Size: 15″ h., ½″ w., 8¼″ d. Shipping Weight 4 lbs. Net Each...... **$18.00**

odel AT37 Level Control—16 ohm "L" pad. For use with midass, treble and VHF drivers in multiway systems. Adjusts output vel to individual taste. Mahogany dial. Net Each...... **$3.90**
odel AT37B—Similar to above but blonde. Net Each.. **3.90**

8HD

AT37

X36

CROSSOVERS

ll E-V crossovers use high-Q air core coils and paper condensers. ow insertion loss; attenuation 12 db per octave in ½ section, db per octave in ¼ section crossovers.

odel X825 Crossover—¼ section. Crossover point, 800 cps. npedances 16 ohms in and out. Size 3 7/16″ h., 4 7/16″ w., 3⅝″ d. hpg. Wt. 3 lbs. Net Each.......................... **$19.00**

odel X8 Crossover—½ section. Crossover point, 800 cps. npedances 16 ohms in and out. Size 4 11/16″ h., 4 7/16″ w., 3⅝″ d. hipping Weight 6 lbs. Net Each.................... **$32.00**

odel X36 Crossover—Recommended for use with VHF drivers. section. Crossover point, 3500 cps. Impedances 16 ohms in and ut. Size 3 7/16″ h., 4 7/16″ w., 3⅝″ d. Shipping Weight 3 lbs. et Each.. **$9.50**

odel X2835 4-Way Crossover—¼ and ½ sections. Crossover oints, 200, 800, 3500 cps. Impedances 16 ohms in and out. Size /16″ h., 5⅞″ w., 5¼″ d. Shipping Weight 10 lbs. Net.. **$75.00**

BUILDING BLOCK KITS

Designed to provide convenient package additions to any full-range speaker or separate two-way system, E-V Building Block Kits contain matched sets of components complete with wiring harness and individual instruction sheets for each unit. Without obsoleting any existing components, the proper Building Block Kit will add exciting new listening pleasure to your present ensemble.

Model BB1. For use with existing 2-way systems (LF driver with treble driver) and coaxial speakers having 1-lb. magnets. Includes T35B Super-Sonax VHF driver, X36 crossover, AT37 level control, wiring harness. Shpg. Wt. 5 lbs. Net Each........ **$37.00**

Model BB2. For use with existing 2-way systems (LF driver with treble driver) and coaxial speakers having 3-lb. magnets or greater. Includes T35 Super-Sonax VHF driver, X36 crossover, AT37 level control, wiring harness. Shpg. Wt. 5 lbs. Net Each **$50.00**

Model BB3. For use with existing LF drivers and coaxial speakers having 1-lb. magnets. Includes T10A driver, 8HD horn, X825 crossover, AT37 level control, wiring harness. Shpg. Wt. 11 lbs. Net Each.. **$86.00**

Model BB4. For use with existing LF drivers and coaxial speakers having 3-lb. magnets or greater. Includes T25A driver, 8HD horn, X8 crossover, and AT37 level control, wiring harness. Shpg. Wt. 13 lbs. Net Each.................................. **$114.00**

Model BB5. Adds very high frequencies with wide dispersion, reserve power, extra sensitivity. For use in systems having extended bass ranges such as Patrician, Georgian, Cardinal IV, Centurion (EIA sens. rtgs. of 50 db and higher). Includes T350 Ultra-Sonax UHF driver, X36 crossover, AT37 level control, wiring harness. Net Each.......................... **$75.00**

THREE CHANNEL STEREO MIXER

Model XT1 Stereo Mixer Transformer—A new product designed to permit complete flexibility of any stereo system especially designed with three-channel stereophonic sound in mind.

XT1 permits use of either 4, 8 or 16-ohm system with feedback loops in the voice coil secondaries of the amplifier output transformers. When such feedback loops are present (most modern amplifiers) a good quality isolation transformer must be used to prevent cancellation of signals in the center channel. The XT1 STEREO MIXER TRANSFORMER isolates the feedback potential and prevents what would otherwise be a short circuit of the audio energy in both amplifiers.

Most stereo recordings are made using the three microphone technique, the third channel being divided equally after recording between the two channels on the record. It continues to exist in so called phantom form. This third channel can be reformed by the use of a third speaker. The signal in this channel consists of sum tones, different in phase and spectral content from the outside channels: The connection using the XT1 passes these tones to the central speaker which regroups them as a new set of sounds identical in character to that picked up by the central microphone during the recording.

The XT1 employs a very high quality 1-to-1 phasing transformer. Unit is connected between amplifiers and speakers not necessary to enter either amplifier or speakers, simple connection. Size: 4⅜″ high, 3¾″ wide and 3¼″ deep. Weight 2½ lbs. Net Ea. **$13.50**

Electro-Voice HI-FI SPEAKERS

VERY-HIGH-FREQUENCY DRIVERS

T350

T35

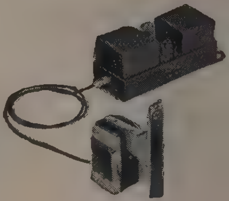
Smooth, silky reproduction . . . extended response to beyond audible limits . . . 180° dispersion using diffraction horns . . . Sonophase throat design* . . . these are the features which have made E-V super-tweeters the music lover's choice.

Model T350—Adds very high frequencies with reserve power, extra sensitivity. For use in deluxe multiway systems having extended bass range. Response to 21 kc. Sens. Rtg. 60 db. 1-lb. magnet. 16 ohms. Recommended crossover 3500 cps. Horn 7½" long, 2⅞" wide. Pot 3½" diameter. Overall depth 4½". Shpg. Wt. 8 lbs. Net Each..**$60.00**

Model T35—Reproduces VHF range, for use with deluxe multiway systems response to 19 kc. Sens. Rtg. 57 db. ½ lb. magnet. 16 ohms. Recommended crossover 3500 cps. Horn 5¼" long, 2" wide. Pot 2¼" diameter. Overall depth 3¼". Shpg. Wt. 3 lbs. Net Each..............**$35.00**

Model T35B—For VHF reproduction in medium efficiency, multiway systems. Response to 18 kc. Sens. Rtg. 54 db. 16 ohms. Recommended crossover 3500 cps. Horn 5¼" long, 2" wide. Pot 2¼" diameter. Overall depth 3". Shpg. Wt. 3 lbs. Net Each..............................**$22.00**

IONOVAC IONIZED AIR VHF DRIVER


T3500

Model T3500 Ionovac—For those who desire the very finest in smooth, extended high-frequency reproduction, Electro-Voice offers the Ionovac VHF driver. In this radical new approach to reproduction of the higher octaves, a glowing violet "cloud" of ionized air replaces the speaker diaphragm. This cloud is modulated directly by the audio signal producing rarefaction and compression of the air forming sound. This sound is unrestricted by properties of mass; not only does it reproduce audible sounds impeccably, but its notably smooth high response reaches well into the ultrasonic range. Frequency response ±2 db from 2 kc to 40 kc. Polar pattern 180°. EIA sensitivity rating 60 db. Recommended crossover 3500 cps. Power handling capacity 50 watts program, 100 watts peak. Impedance 16 ohms. Size: Driver 9" h., 3½" w., 7" d. overall; Electronic unit—5½" h., 5" w., 13½" d. overall. Baffle opening, 1½" x 6". Shpg. Wt., 15 lbs. Net Each....**$150.00**

INTEGRATED 3-WAY SPEAKERS

Three-in-one concentric design combines the advantages of Super-Sonax VHF reproduction with new Sonophase throat design*, Radax propagator, and a large bass cone with heavy double-flux ceramic magnet in one compact, low-priced assembly.

Model 15TRXB—Integrated 3-way assembly completely wired with HF Control. Overall diam. 15⅛". Resonance 38-48 cps. 20 watts. Magnet weight, 1¾ lbs. Response 30-18,000 cps in REGENCY. Mechanical crossover 2000 cps; electrical crossover 3500 cps. Depth behind mounting panel 7⅝". Impedance 16 ohms. Sens. rtg. 47 db. Shipping Weight 17 lbs. X36 not required. Net Each........**$79.00**

Model 15TRX—15⅛" diameter overall. Resonance 35-45 cps. 30 watts. Magnet weight, 5 lbs. Response, 30-19,000 cps in recommended REGENCY enclosure. Depth behind panel, 9⅛". Mechanical crossover 2000 cps, electrical crossover, 3500 cps. Impedance, 16 ohms. Sens. rtg., 51 db. Shipping Weight 43 lbs. With X36 and AT37. Net Each.............**$149.00**

Model 12TRXB—Integrated 3-way assembly completely wired with HF control. Overall diam. 12¼". Resonance 45 cps. 20 watts. Magnet wt., 1¾ lbs. Response, 35-18,000 cps in ARISTOCRAT. Mech. crossover, 2000 cps; built-in electrical crossover, 3500 cps. Depth behind panel 6 1/16". Imp., 16 ohms. Sens. rtg. 46 db. Shipping Weight 14 lbs. X36 is not required. Net Each................**$66.00**

Model 12TRX—Overall diameter 12¼". Resonance, 40 cps. 25 watts. Magnet weight, 5 lbs. Response, 30-19,000 cps in recommended ARISTOCRAT enclosure. Mechanical crossover, 2500 cps; electrical crossover, 3500 cps. Depth behind mounting panel, 8". Impedance. 16 ohms. Sens. rtg. 49 db. Shipping Weight 30 lbs. With X36 and AT37. Net Ea..**$125.00**

15TRX

RADAX COAXIAL SPEAKERS

SP15

The E-V Radax Principle is an economical, super-efficient method of using two coaxial cones, both operating from a single voice coil, to divide the audible spectrum for clean, sparkling reproduction. Except where noted, new double-flux ceramic magnets are used.

Model SP8B Radax Super-Eight—8" speaker. Resonance, 55-65 cps. 20 watts. Response 35-13,000 cps. 16 ohms impedance. Sens. rtg. 45 db. Crossover, 6000 cps. 1½ lb. ceramic magnet. 8⅝" diam., 7" baffle opening. 4⅝" depth behind panel. Shpg. Wt. 9 lbs. Net Each......**$29.50**

Model SP12B Radax Twelve—12" speaker. Resonance, 40-50 cps. 20 watts. Response, 30-13,000 cps. 16 ohms impedance. Sens. rtg., 46 db. Crossover, 4500 cps. 1½ lb. ceramic magnet. 12¼" diameter. 11" baffle opening. 6" depth behind panel. Shipping Weight 12 lbs. Net Each.......................**$35.00**

Model SP12 Radax Super-Twelve—12" speaker. Resonance, 35-45 cps. 25 watts. Response, 30-13,000 cps. 16 ohms impedance. Sens. rtg., 48 db. Crossover, 4000 cps. 3 lb. Alnico V magnet. 12¼" diameter. 11" baffle opening. 7½" depth behind panel. Shipping Weight 23 lbs. Net Each..........**$66.00**

Model SP15B Radax Fifteen—15" speaker. Resonance 38 cps. 15-20 watts. Response 30-13,000 cps. 16 ohms impedance. Sens. rtg. 47 db. Crossover 3500 cps. 1½ lb. ceramic magnet. 15⅛" diam., 13½" baffle opening. 7⅝" depth behind mtg. panel. Shpg. Wt. 15 lbs. Net Each.........................**$43.00**

Model SP15 Radax Super-Fifteen—15" speaker. Resonance, 40 cps. 30 watts. Respons 30-13,000 cps. 16 ohms impedance. Sens. rtg., 50 db. Crossover, 3000 cps. 4¾ lb. ceramic magnet. 15⅛" diameter, 13½" baffle opening 9" depth behind panel. Shipping Weight 38 lbs. Net Each.........................**$89.00**

LOW-FREQUENCY DRIVERS

15W

Model 12BW—12" LF driver, Resonance, 40-50 cps. 1½ lb. ceramic magnet. 20 watts. Impedance, 16 ohms. Sens. rtg., 45 db. 12¼" diam., 11" opening, 6" depth behind panel. Shipping Weight 12 lbs. Net Each...**$35.00**

Model 12W—12" LF driver. Resonance, 35-45 cps. 3 lb. Alnico V magnet, 25 watts. 16 ohms impedance. Sens. rtg. 48 db. 12¼" diameter, 11" max. baffle opening, 7½" depth behind panel. Shipping Weight 23 lbs. Net.**$66.00**

Model 15BW—15" LF driver. Resonance, 38-48 cps. 1½ lb. ceramic magnet. 20 watts. 16 ohms impedance. Sens. rtg. 47 db. 15⅛" diam., 13½" max. baffle opening. 7⅝" depth behind mtg. panel. Shpg. Wt. 15 lbs. Net. .**$43.00**

Model 15W—15" LF driver. Resonance, 25-35 cps. 4¾ lb. ceramic magnet. 30 watts. 16 ohms impedance. Sens. rtg., 50 db. 15⅛" diam., 13½" max. opening, 9" behind panel. Shipping Weight 38 lbs. Net Each..**$89.00**

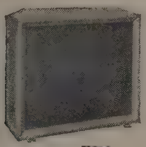
Model 18W—18" LF driver, 30 watts. Resonance, 25-35 cps. 16 ohms impedance. Sens. rtg., 53 db. 18¼" diam., 16½" max, opening, 10" behind panel. 4¾ lb. ceramic magnet. Shipping Weight 41 lbs. Net Each.**$120.00**

Model 30W—30" LF Driver. Resonance, 8 cps. 4¾ lb. ceramic magnet. 100 watts program. 16 ohms impedance. Sensitivity rating 55 db. 29¾" diameter, 28¼" maximum opening, 13½" behind panel. Shipping Weight 42 lbs. Net Each **$185.00**

Note: Sensitivity ratings are EIA standard.
*Design Patent 182,351.

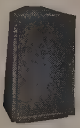
760X-59A

Electro-Voice ENCLOSURE KITS STEREO CARTRIDGES



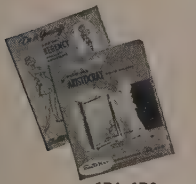
KD4

KD6



KD7

KD5



1B4, 1B6

MAGNERAMIC 31

Now you can own an acoustically correct Electro-Voice high-fidelity, folded-horn speaker enclosure for your home music system and save up to one-half! Build it yourself . . . four models to choose from . . . wall types . . . corner models . . . for full-range loudspeakers . . . for separate two, three and four-way speaker systems.

These superlative, completely engineered kits, designed and styled by Electro-Voice, are ready to assemble. All lumber parts are precut with exterior surfaces of clear-grained korina; glue, screws and nails are included. Easy, step-by-step instructions show you how to "do-it-yourself".

Model KD4 Regency—Functional, low-boy style, folded-horn enclosure for use in a corner or against a wall. The Regency will improve the bass response of any 15-inch loudspeaker and is particularly effective when employed with E-V Models SP15 or SP15B coaxial speakers, 15TRX or 15TRXB three-way reproducers, and systems using Models 15W or 15BW woofers. Size 29⅝″ h., 33½″ w. and 19″ d. Shipping Weight, 70 pounds. Net Each........................**$73.00**

Model KD6 Aristocrat—A deluxe, space-saving, folded-horn corner enclosure. Extends bass range one full octave and increases power-handling capacity of loudspeakers in the lower range by as much as 50%. For use with 12-inch drivers such as E-V SP12 or SP12B coaxial speakers, 12TRX or 12TRXB three-way reproducers, and separate two- and three-way systems using Model 12W or 12BW woofers. Size 29⅝″ h., 19″ w. and 15¾″ d. Shipping Weight, 36 pounds. Net Each **$39.00**

Model KD7 Baronet—Phenomenal performance from a folded-horn corner enclosure of modest proportions. Adds an additional two octaves of bass when enclosure is positioned properly. Designed for use with E-V Model SP8B 8-inch Radax reproducer. E-V T35 or T35B Super-Sonax VHF driver can be added for a separate two-way system. Size 23″ h., 14″ w. and 13″ d. Shipping Weight, 16 pounds. Net Each...**$26.00**

Model KD9 Marquis—Kit version of the popular Marquis along-the-wall folded horn enclosure. Performance and appearance similar to KD6 Aristoorat. Ideal for stereo pairs or for use with KD6 when converting to stereo. Accepts all 12″ loudspeakers plus E-V Model BB1, BB2, BB3 and BB4 Building Block Kits. Size 29⅝″ h., 19″ w., and 14½″ d. Shpg. Wt., 38 lbs. Net Each. .**$36.00**

FINISHING KITS

Electro-Voice finishing kits make it easy for you to obtain professional-like furniture finishes. These kits, prepared especially for the home finisher, are complete with stain filler, sealer, shellac, high gloss and satin varnishes, finishing paper, brushes and simple, easy-to-follow instructions. Available in the following finishes:

Model FK10—Walnut.
Model FK20—Cordovan Mahogany.
Model FK30—Fruitwood.
Model FK40—Cherry.
Model FK50—Golden Oak.
Model FK60—Ebony.

Net Each...**$6.00**

DECORATIVE TRIM KITS

Addition of these custom grille and trim sets will provide, for your enclosure, a smart, finished appearance to compliment any interior decor.

Model AK5—For KD4 Regency. Lacquered, antique brushed brass crossbar grille cut for sight-size of 24″ by 29½″. Shipping Weight, 3 pounds. Net Each..............................**$6.00**

Model AK6—Grille kit for KD6 and KD9, similar to above but smaller size. Shipping Weight, 3 pounds. Net Each..**$4.80**

DO-IT-YOURSELF INSTRUCTION BOOKS

These complete, easy-to-follow instruction books, supplied with Electro-Voice KD kits, are available separately for the home workshop enthusiast. Each book tells you how to build the E-V high-fidelity enclosure of your choice with clear, concise, step-by-step illustrations. Full construction details include tips on selecting lumber, layout and sawing of parts, and recommended E-V speakers and systems for your finished enclosure.

Model IB4 Regency Instruction Book—Net Each..............................**$1.00**
Model IB6 Aristocrat Instruction Book—Net Each.................................**1.00**
Model IB7 Baronet Instruction Book—Net Each.....................................**.75**

THE ALL NEW "MAGNERAMIC 31" COMPATIBLE STEREO CARTRIDGE

WIDE RANGE, HIGH LATERAL AND VERTICAL COMPLIANCE

Electro-Voice, producer of the first modern stereo cartridge, now brings you a new concept in cartridge design. . . . Dramatic in styling, dramatic in performance. . . ! Made possible by 30 years of unique experience in the design of outstanding electro-acoustical products . . . by the largest single engineering corps in the industry. Electro-Voice proudly presents the all-new "Magneramic 31" compatible stereo-monophonic cartridge.

Replaces Magnetics Directly. The 31MD-5 and the 31MD-7 replace conventional magnetic cartridges directly, no circuit changes necessary. Weight of the cartridge is 9 grams; no additional compensating weights are needed. Conventional equalization and pre-amplification, available in all magnetic phono inputs, is all that is necessary.

Available in Standard Models. The new E-V "31" Series consists of the "Magneramic 31" ("M") Models, for magnetic phono inputs, and the Standard Series (no "M" in Model No.), for high-impedance ceramic phono inputs.

"MAGNERAMIC 31" MODELS

For magnetic phono inputs. Compliance, 3.5 lateral and vertical. Response, 20 to 20,000 cps ±2 db. Isolation, 28 db at 1000 cps. Output, 10 millivolts. Recommended load, 22,000 to 47,000 ohms. Elements, 2 lead zirconium titanate ceramics. Terminals, 4, with standard .050 connectors. Mounting centers are standard ½″ and 7/16″.

Model 31MD-5—With .5-mil diamond stylus. For use with transcription-type arms (2-4 grams tracking force). Plays all stereo and LP records. Net Each.............................**$24.00**

Model 31MD-7—With .7 mil diamond stylus. For use with changer arms (4-6 grams tracking force). Plays all stereo and LP records. Net Each..................................**$24.00**

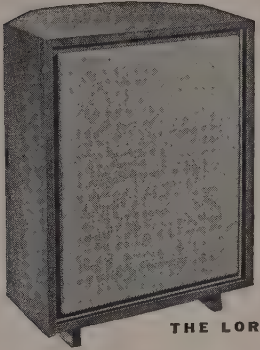
STANDARD MODELS

For high-impedance, ceramic inputs. All specifications given above for "Magneramic 31" models apply to the Standard models, except for the following: Output, 300 millivolts (no external pre-amplification or equalization is required). Recommended load, 3 megohms or higher. If it is desired to use an E-V Standard model, but the proper high-impedance phono input is not available, write to Electro-Voice for Technical Bulletin No. 5 on circuit modification to accept the output of Standard model cartridges.

Model 31D-5—With .5-mil diamond stylus. For use with transcription-type arms (2-4 grams tracking force). Plays all stereo and LP records. Net Each...........................**$22.50**
Model 31D-7—With .7-mil diamond stylus. For use with changer arms (4-6 grams tracking force). Plays all stereo and LP records. Net Each...**$22.50**

WOLVERINE HI-FI ENCLOSUR

by Electro-Voice



THE LORAINE

THE WOLVERINE LORAINE LOUDSPEAKER ENCLOSURE

Direct radiator, folded-horn corner enclosure for 12″ speakers and separate 3-speaker systems; includes an adapter ring for 8″ speakers.

Small . . . the Loraine's diminutive 27-inch height incorporates all the acous ments of a **true** corner horn, accommodates the Wolverine LS12 speaker, plu and MF1 Step-Up Kits.

Smart . . . the Loraine has the mark of modern speaker enclosure design. Lig and simplicity of line are set off by subtle contrasts of decorative brass tri polished wood-grained finishes. Base cleats are removable for custom install

Phenomenal . . . corner back-loaded speaker enclosure. The room corner bec unique design element—the multiple reflections of the sound source at th reinforce and extend the bass range. Low-range bass efficiency is increased by 40%, reducing diaphragm excursion and providing proper damping.

DESIGN FEATURES—

- Precut ports for quick, easy installation of high-frequency and mid-range sp
- Predrilled mounting holes for all Wolverine speaker controls.
- Heavy, vibration-free ¾″ plywood used throughout.
- Small enough to be used in multiple for quality low-level installations. enough to cluster for 360° coverage.
- Speaker mounting board fitted with adapter ring for 8-inch loudspeakers.

Size 27″ high, 20″ wide, 14″ deep. Shipping Weight 42 lbs.
Choice of hand-rubbed Mahogany-grained, Walnut-grained, or Blonde finish

Enclosure only—Net Each.................................... $4

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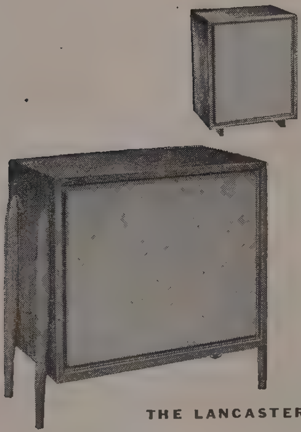

THE LANCASTER

THE WOLVERINE LANCASTER LOUDSPEAKER ENCLOSURE

Direct radiator, along-the-wall, back horn-loaded enclosure, for 12-inch speak separate 2- and 3-speaker systems; includes an adapter ring for 8″ speakers

Functional . . . a modular enclosure, finished on four sides for low-boy or high-b Accommodates the Wolverine LS12 speaker, plus HF1 and MF1 Step-U

Compact . . . Ideally-sized for wall, bench or floor mount and stereo speaker a ments. Highest performance in less than 2 square feet of floor space.

Smartly Styled . . . subtle contrasts of wood-grained finishes and brushed highlight and frame an unusual speaker mounting board. Turned wood legs (il'us optional accessory LK1 Kit, $8.00, see listing below) in matching finishes re fle temporary tastes in furniture design. Cabinet is supplied with two cleat legs.

Outstanding Performance . . . In operation, the new Wolverine Lancas extends the frequency response range nearly one full octave lower than possible reflex boxes of comparable size. Efficiency in the low bass range is increased four times (6 db). The smooth, augmented, distortion-free bass range gives a st degree of musical balance with the superlative treble, otherwise unobtainable

FEATURES—

- Cleat and accessory leg holes partially drilled for both high-boy and low-b
- Speaker level control holes partially drilled.
- Heavy, vibration-free, ¾″ plywood.
- Precut ports for fastest installation of high-frequency and mid-range sp
- Speaker mounting board fitted with adapter ring for 8-inch speakers.

Size 25″ high, 20″ wide, 14″ deep. Shipping Weight 38 lbs.
Choice of Mahogany-grained, Walnut-grained, or Blonde finish.
Enclosure only. Net Each.................................... $

Model LK1 Accessory Leg Kit (large illustration to left) . . . Optional ac available in sets of 4 legs, predrilled and finished, with hardware and instr

Choice of Mahogany, Walnut or Blonde finish. Shpg. Wt. 4 lbs. Net Each

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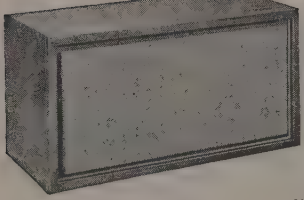


THE LINDON

THE WOLVERINE LINDON LOUDSPEAKER ENCLOSURE

Direct radiator, shelf-type enclosure for 8″ speakers and separate 2-way syst

Styling-in-Miniature . . . to blend in any setting. Smart wood-grained fini brushed brass and distinctive speaker board fabrics add a decorative touch t home. An agreeable match for larger Wolverine cabinets and systems in 2- stereo arrangements. (Also available ready-to-finish for special custom instal

Compact . . . extended bass performance in a bookcase-size enclosure when us the Wolverine LS8 full-range loudspeaker. Rigid construction of heavy vibration-free plywood. Speaker mounting board is precut for quick, easy of the Wolverine Model HF1 very-high-frequency driver package.

Versatile . . . maximum bass in minimum space allows use in bookcase insta Finished four sides—adapts attractively to any limited-space application o speaker arrangement.

FEATURES—

- Adaptable to any application: bookcase, stereo speaker arrangements, t table mount.
- Rigid construction, vibration free.
- Speaker level control holes partially drilled.

You'll like the way the Lindon improves the performance of any speaker.
Size 11″ high, 23½″ wide, 10″ deep. Shipping Weight 17 lbs.
Choice of hand-rubbed Mahogany-grained, Walnut-grained, or Blonde finish

Enclosure only. Net Each......................................$

Smooth-sanded, ready-to-finish. Enclosure only—Net Each..............$

754-59A

WOLVERINE HI-FI SPEAKERS

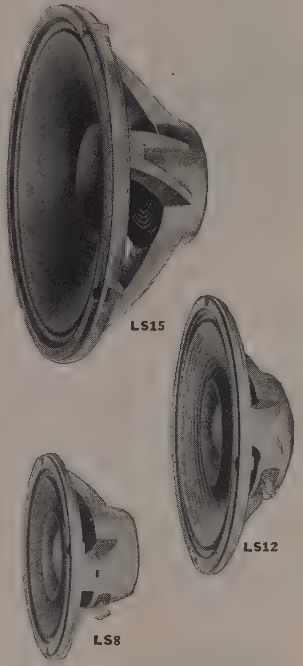
by Electro-Voice

WOLVERINE FULL-RANGE LOUDSPEAKERS

Perfect for Stereo—Realistic stereo performance demands high-quality loudspeakers having crisp, wide-range response. These new Wolverine speakers meet this demand at a price so reasonable that two complete systems for stereo can be purchased for the price of so many single competitive systems. Construction features of these loudspeakers are those of the highest priced components.

- **Heavy-Duty Diecast Frames**—The hallmark of fine loudspeakers. All other popular-priced loudspeakers have frames of stamped sheet metal, bend easily . . . allow the speaker cone and delicate voice coil to shift position. Heavy duty Wolverine speakers guarantee permanent centering of all elements.
- **Radax Construction**—Two cones divide the sound, one for maximum bass reproduction and a second, smaller cone for efficient high-frequency performance. Clean, crisp highs are produced well past the point where conventional speakers fail.
- **Edgewise-Wound Voice Coil**—Voice coils are edge-wound of precision flattened ribbon conductor; efficiency is increased 18% over conventional round-wire coils, gaining the equivalent of 5 extra watts from a typical amplifier.
- **Glass Coil Form**—The voice coil is wound on a Fiberglass form into a rigid, concentric assembly. This exclusive assembly maintains shape for the life of the speaker system, permanently preventing shorts and distortion-causing rubs.
- **Long-Throw Voice Coil**—Wolverine speakers contain deep, medium diameter voice coils. Conductor remains in the air gap even on longest excursions, preventing nonlinear operation characteristic of wide diameter, short-throw coils.
- **Low Silhouette Frame**—Wolverine speaker frames are shallow, for easy mounting in walls or ceilings. Ideal for building in "sound conditioning" the entire home.

Other Quality Features—Wolverine cones are fungi-proofed, treated to prevent moisture absorption in areas of high humidity. Specialized thermosetting adhesives produce the lightest, most rigid moving mechanisms possible. Tough, one-piece molded cones are used exclusively, and all hidden parts are precision ground to jewel-like accuracy.



Model LS15 15-inch Loudspeaker—Frequency response 30 to 13,000 cps; EIA sensitivity rating 48 db. Free-space cone resonance 38 cps. Power handling capacity 20 watts program, 40 watts peak. Power required for 100 db level (concert volume), program material in live room, 8 watts. Damping factor 15; impedance 8 ohms. Mechanical crossover 1600 cps. Total flux 89,000 maxwells. 15⅜" dia., 6 11/32" deep, 13⅞" baffle opening; mounts with four 9/32" holes equally spaced on 14 9/16" circle. Weight 11 lbs. net, 12 lbs. shipping. Net Each........................**$24.50**

Model LS12 12-inch Loudspeaker—Frequency response 30 to 13,000 cps; EIA sensitivity rating 43 db. Free-space cone resonance 40 cps. Power handling capacity 20 watts program, 40 watts peak. Power required for 100 db level (concert volume), program material in live room, 12 watts. Damping factor 15; impedance 8 ohms. Mechanical crossover 1800 cps. Total flux 70,700 maxwells. 12¼" dia., 3½" deep; 11" baffle opening; mounts with four ¼" holes equally spaced on 11½" circle. Weight 5½ lbs. net, 6 lbs. shipping. Net Each.............................**$19.50**

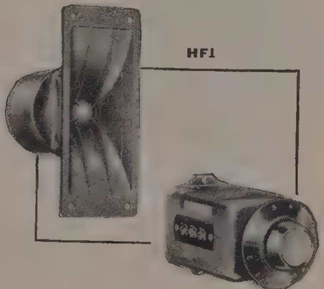
Model LS8 8-inch Loudspeaker—Frequency response 50 to 13,000 cps; EIA sensitivity rating 42 db. Free-space cone resonance 55 cps. Power handling capacity 20 watts program, 40 watts peak. Power required for 100 db level (concert volume), program material in live room, 15 watts. Damping factor 15; impedance 8 ohms. Mechanical crossover 2000 cps. Total flux 70,700 maxwells. 8⅜" dia., 3½" deep; 7⅞" baffle opening; mounts with four ¼" holes equally spaced on 7⅝" circle. Weight 4½ lbs. net, 5 lbs. shipping. Net Each.............................**$18.00**

● ●

WOLVERINE STEP-UP KITS

These step-up kits allow you to expand your full-range speaker to a 2 or 3-way system one economical step at a time, without obsoleting existing units. Wolverine mid and high-frequency drivers are characterized by these Electro-Voice exclusives.

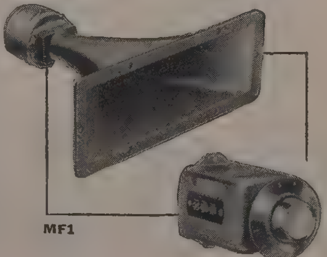
- **Avedon Throat Design**—Prevents sound cancellation at highest frequencies, extends frequency response.
- **Hoodwin Diffraction Horn**—Spreads sound evenly through a solid 180° arc to all parts of the listening area for realistic reproduction.
- **Linen Diaphragm**—The phenolic-impregnated diaphragm has fine musical quality, is not subject to radial break-up characteristic of aluminum diaphragms.
- **Light Voice Coil**—With a self-supporting voice coil, weight is reduced by 80%, allowing accurate tracing of delicate high-frequency sounds.
- **Painted Leads**—To prevent parting due to repeated flexing of compliance rolls, Wolverine drivers contain leads of conductive paint, another E-V exclusive.



HF1

Wolverine crossover networks, true crossovers and not just hi-pass filters, are specially designed for use with Wolverine drivers. The crossover points are well above the horn cutoff avoiding cutoff-frequency distortion. A 6 db/octave slope provides inaudible transition between drivers. Other features include built-in, wire-wound level control, quality air-core coils and capacitors, and simple single-hole mounting provisions.

Model HF1 High-Frequency Step-Up Kit—Can be added to any 8" or 12" Wolverine full-range speaker. Extends high-frequency performance beyond audible limit with silky, precise definition. Consists of TW35 VHF driver, CR35 crossover-level control, wiring, mounting hardware and instructions for 5-minute installation. TW35 size: horn 5¼" x 2", pot dia. 2¼", overall depth 2¾". Baffle opening 1¾" x 4¼". HF1 shipping weight 3 lbs. Net Each..**$20.00**



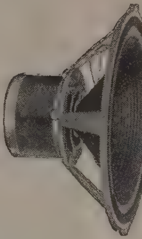
MF1

Model MF1 Mid-Range Step-Up Kit—For addition to all 12" Wolverine speakers after the HF1 step-up kit is installed. Completes your 3-way speaker system and spreads mid-range sound evenly throughout the room; has increased output in the vital "presence" range, and smooth, peak-free frequency response. Consists of MR10 treble driver, CR10 crossover-level control, wiring, mounting hardware and instructions for 5-minute installation. MR10 size: horn 4" x 10½", pot dia. 2⅜", overall depth 9⅜". Baffle opening 9½" x 3". MF1 shipping weight 5 lbs. Net Each..**$25.00**

Wharfedale Speakers and Books

FULL RANGE, COAXIAL SPEAKERS

A


B

C

D

SPECIAL WHARFEDALE FEATURES

Foam Suspension: Famous Wharfedale cloth suspension has been replaced by improved plastic foam. Results in increased resilience to reduce incidence of distortion at low frequencies, plus extra softness to improve dissipation of middle and high frequency vibrations at cone edge.

Low Cone Resonances: Fundamental resonances are kept as low as is consistant with reliability. On 10″ and 12″ units resonance is below 40 cps and 15″ below 30 cps.

Aluminum Voice Coils: Used on several models for maximum high frequency efficiency. Tuned ultrasonic tinning results in voice coils which are guaranteed 12 months of the year in all climates.

Die-Cast Chassis: Open die-cast chassis are used on all models for maximum rigidity and minimum resonance.

Ample Power Handling Capacity: Wattage ratings shown apply to open baffle operation only. Properly loaded, all units will safely handle peak output from high wattage amplifiers on normal program material at domestic volume levels.

COAXIAL 12 SPEAKER (FIG. A)

Superb speaker gives the flexibility of a dual speaker system; extra effective in minimum-sized enclosures for stereo systems. Unique magnet design has concentric gaps; 1¾″ gap for woofer; 1″ for tweeter. Special main cone is extra heavy for very low resonance when properly baffled. Tweeter cone has aluminum center dome and voice coil. **Cone Resonance:** 25-30 cps. **Flux Density:** 14,000 gauss, low end; 13,200, tweeter. **Impedance:** 12-15 ohms. **Power:** 40 watts. **Control:** Constant impedance volume. Shipping Weight, 26 lbs.

Wharfedale Coaxial 12—
Net Each.................. **$139.50**

SUPER 12/FS/AL SPEAKER (FIG. B)

Improved model of Wharfedale's finest single speaker. Features new cone to provide smoother response in upper middle range. Provides high sensitivity and wide range performance. **Cone Resonance:** 30-38 cps. **Flux Density:** 17,000 gauss. **Impedance:** 12-15 ohms. **Power:** 12 watts. Shipping Weight, 22 lbs.

Wharfedale Super 12/FS/AL— **$89.50**
Net Each..................

W10/FSB SPEAKER (FIG. C)

Wide-range 10-inch unit, with high flux density and aluminum center dome for improved high frequency response. Recommended for baffle or reflex loading; may also be used as tweeter. **Cone Resonance:** 30-38 cps. **Flux Density:** 16,000 gauss. **Impedance:** 12-15 ohms. **Power:** 10 watts. Shipping Weight, 11 lbs.

Wharfedale Model W10/FSB— **$47.50**
Net Each...................

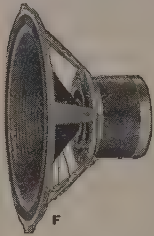
SUPER 8/FS/AL SPEAKER (FIG. D)

Outstanding full-range unit with aluminum voice coil, providing smooth response up to 15,000 cps. May be used in a two- or three-way system with a crossover of approximately 1,000 cps, or as a single speaker. **Cone Resonance:** 55-65 cps. **Flux Density:** 14,500 gauss. **Impedance:** 8-10 ohms. **Power:** 4 watts. Shipping Weight, 5 lbs.

Wharfedale Super 8/FS/AL— **$26.50**
Net Each...................

WOOFERS, TWEETERS AND CROSSOVERS

E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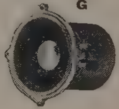
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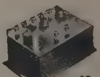

H

W15/FS BASS DRIVER (FIG. E)

Massive speaker with heavy, rigid cone and extra large voice coil is the ideal low frequency unit; achieves smooth response over the entire bass spectrum, 25-3,000 cps. Reproduces bass tones without distortion. Ideal for reflex cabinet. **Frequency Response:** 25-3,000 cps. **Cone Resonance:** 25-30 cps. **Flux Density:** 13,500 gauss. **Impedance:** 12-15 ohms. **Power:** 15 watts. Shipping Weight, 22 lbs.

Wharfedale Model W15/FS—Net Each............. **$89.50**

W12/FS BASS DRIVER (FIG. F)

Ideal woofer for two- and three-way systems. Features low cone resonance and smooth response. Similar to Model W15/FS, but only 12″ diameter. **Cone Resonance:** 30-35 cps. **Flux Density:** 13,000 gauss. **Impedance:** 12-15 ohms. **Power:** 12 watts. Shipping Weight, 16½ lbs.

Wharfedale Model W12/FS—Net Each............. **$52.50**

SUPER 3 TWEETER (FIG. G)

Highly efficient treble unit for frequencies above 3,000 cps. Small cone, and absence of conventional centering device results in smooth response extending to 20,000 cps. May be added to any existing speaker system to reinforce extreme "top". **Flux Density:** 14,500 gauss. **Impedance:** 8-15 ohms. **Power:** Any reasonable level of integrated program material (treble only). Shipping Weight, 4½ lbs.

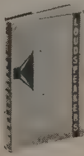
Wharfedale Super 3—Net Each..................... **$26.50**

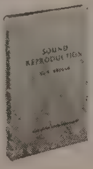
CROSSOVER NETWORKS (FIG. H)

Divide bass and treble between speakers and drivers, to provide each unit with a specific frequency range. Provide 6-9 db attenuation per octave outside passband, except 3-speaker type, which is 12 db. **Impedance:** 7-16 ohms, all units. Shipping Weight, 2½ lbs.

Wharfedale 1000-Cycle Crossover—Net Each......... **$18.25**
Wharfedale 3000-Cycle Crossover—Shpg. Wt., 3 lbs. Net **$18.25**
Wharfedale 3-Speaker Crossover—800 and 5000 cps crossovers. Mid-range and treble level controls. Shpg. Wt., 7 lbs. Net **$42.25**

PIANOS, PIANISTS AND SONICS





BOOKS BY G. A. BRIGGS

"Loudspeakers"—Completely revised, enlarged fifth edition, by Mr. Briggs, England's pre-eminent authority on hi-fi sound, and designer of Wharfedale speakers. Covers development, design, and performance of loudspeakers and enclosures. Includes valuable information on magnets, cones, coils, quality, distortion, room acoustics, etc. Illuminating question and answer section. 336 pages; 230 illustrations. Only.............................. **$4.50**

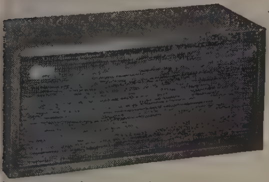
"Sound Reproduction"—Comprehensive study of methods, components and systems of sound reproduction. Ideal volume for the beginning audiophile. Only.............................. **$3.50**

"Pianos, Pianists and Sonics"—Interesting, informative volume relates the whys and wherefores of sound as demonstrated by pianists on their instruments. Only.............................. **$2.50**

755-59A

Wharfedale Speaker Systems

MODEL WS/2 FULL-RANGE TWO-WAY SPEAKER SYSTEM

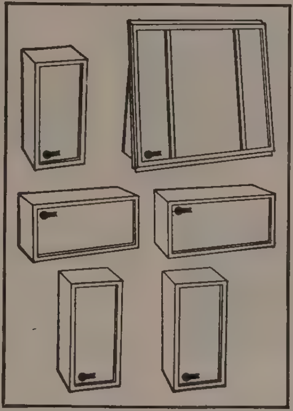


l-range performance in an extra-com-
t design; needs no auxiliary tweeter. A
of these units are ideal for stereo sys-
s; compact, portable and versatile;
e all problems where space is limited.
ause of the full range, big system
nd, this system is also highly compat-
with larger Wharfedale (or other) sys-
s as a stereo companion. Unique engi-
ring delivers full rich bass response
hout booming or harsh resonances.
ble response is clean and non-strident;
oduces the highest piccolo notes faith-
y. Sealed, infinite baffle enclosure is
fully integrated and matched to the
akers to assure proper loading at all
es; carefully constructed to eliminate
anted resonances. Cabinetry is finished
all four sides, permitting vertical or
zontal placement; available in a vari-
of finishes to blend easily with con-
porary or period decors. Speakers uti-
d were specially engineered for this sys-
: A special 8″ combination woofer and
-range Wharfedale speaker and a spe-
3″ tweeter with crossover. System is
pletely assembled and sealed. **Imped-
e:** 12-15 ohms. **Size:** 24″ w. x 10½″ d.
″ h. Shipping Weight, 25 lbs.

arfedale Model WS/2—Specify wal-
mahogany or blond finished
h. Net Each.............. $\$89^{50}$

arfedale Model WS/2—Gen-
oil finished walnut. Net Ea. $\$94^{50}$

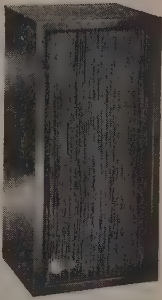
arfedale Model WS/2—Sanded, ready-
nish birch.
Each.................... $\$79^{50}$



Wharfedale speaker systems combine the finest in speaker components with unique, modern enclosures to achieve the highest performance standards. This compatible blending of speaker and baffle is carefully retained throughout the entire line of systems, from the miniature sized Model WS/2 to the outstanding Briggs C-500. Because of this consistent quality, Wharfedale systems are ideal for use in stereo systems. Identical units may be easily paired for full compatibility; non-identical systems may be matched for close compatibility. This permits the use of two or more sizes or types of enclosures to meet your particular space problems. Models finished on all four sides for extra versatility; can be utilized in any position to suit room acoustics. Whatever your needs, Wharfedale makes a speaker system to fulfill them.

MODEL W20 FULL-RANGE TWO-WAY SYSTEM

- 12″ COAX PLUS SUPER 5 TWEETER
- SEVERAL FINISHES AVAILABLE



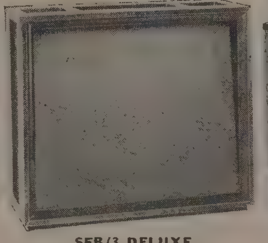
Top performance in a compact system for truly outstanding response. Features improved linearity and low bass response; compares favorably with higher priced systems. Can be used as second speaker in stereo systems using a larger system. Treble control, supplied with the speaker, permits adjustment of tweeter volume to suit your room acoustics and "ear". The system is based on Wharfedale's Coaxial 12 full-range speaker that features bass resonance in the 25-30 cps region. The second speaker is a specially designed, Super 5 tweeter with LC crossover network and treble control. Crossover point is 1,000 cps. Units are carefully matched, and integrated in the enclosure. Carefully finished, fine furniture styled, cabinetry is finished on all four sides, allowing vertical or horizontal placement. **Impedance:** 15 ohms. **Size:** 23½″ w. x 12″ d. x 14″ h. Shipping Weight, 40 lbs.

Wharfedale Model W20—Specify walnut, mahogany or blond finished birch. Net Each........... $\$174^{50}$

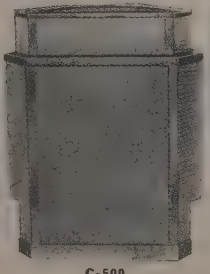
Wharfedale Model W20—Genuine oil finished walnut. Net Each .... $\$184^{50}$

Wharfedale Model W20—Sanded, ready-to-finish birch. Net Each................ $\$159^{50}$

SFB/3 CUSTOM



SFB/3 DELUXE



C-500

W/AF/1

W/AF/2

ODEL SFB/3 THREE-WAY SYSTEM

nplete Wharfedale system features
e special speakers, matched and acous-
ly integrated with a resonance-free,
l-filled baffle. Speakers include 12″ bass
er, 10″ wide range unit and 3″ tweeter.
eptional smoothness and excellent
sient response make sound a revealing
rience. Omnidirectional spacious sound
lts from open design which allows
kers to radiate in all directions; elim-
es "point source effect". Unit is free-
ding and mobile, performs without de-
lence upon placement against walls,
ners, etc. **Impedance:** 15 ohms. **Fre-
ncy Response:** 20-20,000 cps.

arfedale Model SFB/3 Custom Sys-
—Specify walnut, mahogany or blond
birch) finish. **Size:** 34″ w. x 12″ d. x
h. Shipping Weight, 100
Net Each.............. $\$225^{00}$

arfedale Model SFB/3 Deluxe System
pecify walnut, mahogany or blond (on
h) finish. **Size:** 35″ w. x 13″ d. x 31½″ h.
ping Weight, 106 lbs.
Each...................... $\$279^{00}$

MODEL C-500 3-WAY CORNER SYSTEM

Utilizes the famous Briggs sand-filled, corner reflex cabinet with superb Wharfedale speaker system for unexcelled performance. System includes Models W15/FS woofer, Super 8/FS/AL mid-range, and Super 3 tweeter with 800 and 5,000 cps crossover. Cabinet construction features a separate bass chamber of double-wall panels to be sand filled to eliminate resonances and provide necessary damping; chamber is 9 cu. ft. in volume. Separate treble section at top is open baffle design; holds mid- and high-range speakers mounted facing upwards to reduce directional effects. Unit is shipped in three sections, fully finished, and ready for final assembly; requires no glue, screws or tools. Sand is not supplied. **Impedance:** 8 ohms. **Power:** 20-70 watts. **Size:** 37½″ w. x 23″ d. (along wall) x 47″ h., overall. Shipping Weight, 185 lbs. Specify walnut, mahogany or blond finished birch.

Wharfedale Model C-500 System—Net Each......... $\$325^{00}$

Wharfedale Model C-500 Deluxe System—Same, but with rear panels (not supplied on standard model). Net Each.................. $\$385^{00}$

MODELS W/AF/1 AND W/AF/2 2-SPEAKER SYSTEMS

Wharfedale Model W/AF/1 System—Complete two-speaker system with acoustic-filter enclosure. Enclosure of heavy hardwood and finished in genuine mahogany, walnut or blond (specify when ordering). Acoustic-Filter design improves power handling capacity at low frequencies and reduces standing wave effects. System incorporates Wharfedale speaker Models W10/FSB for low and mid-range response, and Super 3 tweeter for clear, sharp highs. **Impedance:** 15 ohms. **Size:** 17″ w. x 12″ d. x 30″ h. Shipping Weight, 55 lbs. Net Each........... $\$164^{50}$

Wharfedale Model W/AF/2 System—Similar to above system but in larger enclosure and with a larger bass speaker. Speakers employed are Wharfedale Model 12/FS/AL and Super 3 tweeter; together, delivering more power than the above system. **Impedance:** 15 ohms. **Size:** 23″ w. x 15⅝″ d. x 36⅝″ h. Shipping Weight, 95 lbs. Specify walnut, mahogany or blond finish. Net Each. $\$225^{00}$

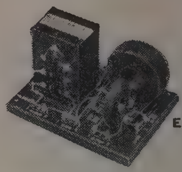
Bozak Speakers, Networks

A

B

C

D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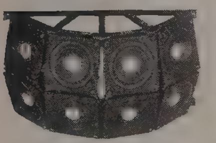
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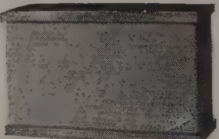
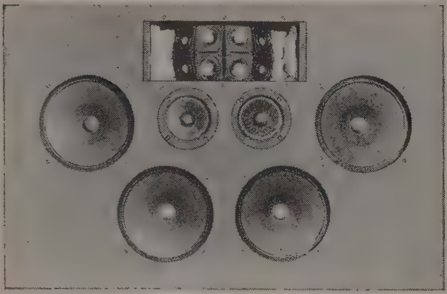



H

These loudspeakers and crossover networks are the "building blocks" for all Bozak speaker systems. Each is designed to do the best possible job in its own range of response, plus match perfectly with its "team-mates" for tonal quality and sound level. The design and engineering enables you to achieve your goal by easy stages of growth without the penalty of scrapping "outgrown" speakers and networks. Start modestly with a wide-range, 2-way B-207A speaker; then add other speakers along with a modifyable crossover network; step-by-step you achieve a four-woofer 50 to 60 watt giant. Your Bozak enclosure works the same way; an infinite baffle that can be chosen for the largest system you expect to finally have. A removable back and unused speaker openings with removable panels permit simplified expansion of your system.

MODEL B-199A BASS SPEAKER (FIG. A)

For use in two-way systems with Bozak B-200X, and three-way systems with Bozak B-209 and B-200X or B-200XA Speakers. **Response:** 40 to 4,500 cycles, with gradual roll-off. **Impedance:** 8 ohms. **Power Rating:** 20 watts. **Resonance:** Below 40 cycles in free air. 1½" diameter voice coil. High density field of a 1½ lb. Alnico V magnet. Diaphragm of Bozak-made variable-density felted paper, with moisture-proof centering, high-compliance suspension on rubberized cloth. **Depth:** 5⅞" front-to-back. Four equally spaced mounting holes, on 11⅝" diameter circle. Eleven-inch diameter baffle opening. Enclosure should have optimum value of 8 cubic feet, with 5 to 16 cubic feet being acceptable. It should be a totally enclosed box, acoustically lined and cross braced. Weight, 8 lbs.
Bozak Model B-199A Bass Speaker—Net Each....... $\$49^{50}$

MODEL B-209 MID-RANGE SPEAKER (FIG. B)

For use in three-way systems with Bozak B-199A and B-200X or B-200XA Speakers. **Response:** 200 to 3500 cycles. **Impedance:** 8 or 16 ohms. **Power Rating:** For use in 20 to 50-watt systems. **Resonance:** None. Voice coil 1½" diameter. **Crossovers** (recommended values): 400 or 800, and 2500 cycles. Field 1½ lb. Alnico V magnet. Damping to permit use in woofer cavity without isolation; and if baffled separately, 1 cubic foot lined with sound-absorbent materials. Direct radiating design matched to Bozak Bass and Treble Speakers; 6 db per octave crossovers with single non-resonant networks and without leveling pads or controls. **Depth:** 3½" front to back. **Mounting:** Four equally spaced holes on 6" diameter circle. **Baffle Opening:** 5⅓" diameter. Weight, 6½ lbs.
Bozak Model B-209 Mid-Range Speaker—Net Each.. $\$48^{00}$

MODEL B-207A COAXIAL SYSTEM (FIG. C)

A complete two-way Speaker System, consisting of a Bozak B-199A Bass Speaker ("woofer") with a coaxially mounted Bozak B-200X Treble Speaker ("tweeter"). Provides excellent sound at an extremely low cost for a complete system. **Response:** 40 to 16,000 cycles; useful beyond 20,000. **Impedance:** 8 ohms. **Power Rating:** 20 watts, peaks to 60 watts. **Size:** O.D. of mounting ring 15"; depth behind panel 7". Fits 12" or 15" cutouts. Weight, 13 lbs. Enclosure same as B-199A. The B-207A should be powered by an amplifier of 20 watts or greater power. Connect the B-207A to the 8-ohm tap on your amplifier. Weight, 13 lbs.
Bozak Model B-207A Coaxial System—Net Each..... $\$83^{50}$

MODEL B-200X TREBLE SPEAKER (FIG. D)

For use in two-way systems with Bozak B-199A, and three-way systems with Bozak B-209 and B-199A Speakers. No leveling controls needed for matching. Response is smooth and clean with a natural quality, wide angle dispersion, and complete absence of metallic harshness. **Response:** 2000 to 16,000 cycles; useful to 20,000. **Horizontal Coverage:** 120 degrees at 10 kc. **Impedance:** 8 ohms (two 16-ohm sections in parallel). For use in 20-watt systems. (Use in multiples for greater power). **Field:** Two 8-ounce Alnico V magnets. **Size:** 6½" w. x 2½" d. x 3¼" h. Wt., 2¾ lbs.
Bozak Model B-200X Treble Speaker—
Net Each.. $\$30^{00}$

Bozak Model XAB Tweeter Bracket—Bracket for mounting up to four B-200X speakers as shown in Fig. F.
Net Each .... $\$3^{60}$

Bozak Model CXR Coax Mounting Ring—Mounting ring fits on B-199A Bass speaker for mounting B-200X tweeter to form coaxial unit as shown in Fig. C. Net Each................**$4.50**

MODEL B-200XA TWEETER ARRAY (FIG. F)

Four B-200X dual tweeters positioned for best horizontal and vertical coverage. **Response:** 1500 to 16,000 cps; useful beyond 20,000 cps. **Horizontal Coverage:** 180° at 16 kc. **Impedance:** 8 ohms. **Power Rating:** For 50-watt systems. **Magnets:** Eight 8-ounce Alnico V. **Size:** 12½" wide, 5" deep, 6½" high. **Mount:** Outside woofer cavity. Weight, 11¼ lbs.
Bozak Model B-200XA Tweeter Array—Net Each.. $\$132^{00}$

MODEL B-100 TWEETER SYSTEM (FIG. G)

Handsome, discrete cabinet mounting of the B-200~~XA~~ tweeter array; permits addition of this unit to existing woofer enclosures for extra warmth, natural musical values, and broad spatial coverage. Specify walnut, mahogany or birch veneer finish; harmonizing grille cloth. **Size:** 15¾" w. x 7" d. x 10" h.
Bozak Model B-100 Tweeter System—Net Each.... $\$165^{00}$

CROSSOVER NETWORKS (FIG. E)

All-electric devices, ruggedly built to separate the audio spectrum into three ranges and distribute them to the proper speakers in a Bozak 3-way system. Unlike conventional systems, Bozak speakers overlap the adjacent ranges broadly; eliminating "disembodiment" of instruments. "Slow" 6 db per octave networks are inherently free of transient distortion (ringing).

MODEL N-10102 CONVERTIBLE CROSSOVER

Engineered for easy conversion to facilitate building one Bozak speaker system to another. For a B-302A system, there are 8 ohm crossovers at 800 and 2500 cps. For B-305 system, crossovers are 16 ohms at 800 and 2500 cps. For B-310A and B-400 systems, crossovers are 8 ohms at 400 and 2500 cps when used with N-25 condenser bank, below. Complete operating instructions provided. **Size:** 8" w. x 6" d. x 5½" h. Weight, 5 lbs.
Bozak Model N-10102 Crossover Network—Net Each. $\$27^{50}$

MODEL N-25 CONDENSER BANK

Convenient accessory to the N-10102 Crossover; provides 8 ohm crossovers at 400 and 2500 cps as required for B-310A and B-400 systems.
Bozak Model N-25 Condenser Bank—Net Each...... $\$11^{60}$

MODEL N-103 CROSSOVER NETWORK

Designed for crossover at 400 and 2500 cps for 16 ohm speakers; specifically, B-305 systems. "Slow" 6 db per octave crossover subtly enhances mid-range response. **Size:** 8" w. x 8" d. x 5½" h. Weight, 6 lbs.
Bozak Model N-103 Crossover Network—Net Each... $\$37^{50}$

MODEL N-104 CROSSOVER NETWORK

Versatile unit for use with B-310A or B-400 systems. Provides 8-ohm crossovers at 400 and 2500 cps, 6 db per octave. **Size:** 8" w. x 8" d. x 5½" h. Weight, 6 lbs.
Bozak Model N-104 Crossover Network—Net Each... $\$37^{50}$

MODEL P-400P PANEL MOUNTED SYSTEM (FIG. H)

Complete panel-mounted system, ready for installation in your cabinet. **Components Include:** Four B-199A woofers; two 16-ohm B-209 mid-range speakers; one B-200XA tweeter array; and N-104 crossover network. **Frequency Response:** Below 28 to 16,000 cps; **Crossover:** 400 and 2500 cps. **Impedance:** 8 ohms. **Power Rating:** 50-60 watts, peaks to 100 watts. **Size:** 46⅕" w. x 1½" d. x 31½" h. Weight, 98 lbs.
Bozak Model P-400P System—Net Each........... $\$522^{00}$

Bozak Systems and Cabinets

A

B

C

ese systems use the building-block units shown on the opposite ge for unrivalled performance. Enclosures are rugged, infinite ffles finished in hardwood veneers. "Contemporary" model avail- e in walnut, mahogany or blond; "Provincial" units in cherry itwood only; "Urban" in walnut or ebony. **Specify finish desired.**

B-304 "STEREO-FANTASY" SYSTEM

lf-contained stereophonic speaker system—an original concept Bozak available in two cabinetry designs. Unique design blends sound from both sources into a unified front similar to that of concert hall; individual instruments and voices are in their oper positions within the larger body of sound. Stereo effect is intained over a wide listening area without "beaming" or "hole the middle". System utilizes two complete, but separated, 302A speaker systems, each in its own infinite baffle. Hinged irectors" (wings) permit optimum use of room acoustics. For st results, this system should be used with two 30-watt ampli- rs, 40-16,000 cps.

zak Model B-304 Provincial (Fig. A)—Size: 49″ w. x ″ d. x 32″ h. Net Each........................ $820.00
zak Model B-304 Contemporary (Fig. B)—Size: ″ w. x 22″ d. x 31½″ h. Net Each.................. $620.00

MODEL B-305 THREE-WAY SYSTEM

three-way system with built-in 6 db per octave crossovers at 800 d 2500 cycles. Two B-207A Coaxial units, one B-209 Mid-Range eaker (16 ohms), and the N-10102 Crossover. The Woofers housed in a rigid, acoustically treated baffle of about 8 cubic ot volume. The distinctive cabinet, in birch, walnut or mahog- y veneer, is of ¾″ plywood rigidly braced with 2 x 4's. **Response:** to 16,000 cycles. Useful to beyond 20,000 cycles. **Impedance:** ohms. **Power Rating:** 30 watts; peaks to 60 watts.

zak Model B-305 Provincial (Fig. C)—Size: 40″ w. 0″ d. x 31″ h. Net Each.......................... $495.00
zak Model B-305 Urban (Fig. D)—Size: 36″ w. x ″ d. x 30″ h. Net Each.......................... $430.00
zak Model B-305 Contemporary (Fig. E)—Size: ½″ w. x 18½″ d. x 32″ h. Net Each............. $390.00
zak Model P-305P Panel Mounted System—Same as above. ly mounted on panel (without cabinet). et Each.................................... $249.00
zak Model E-305 Provincial Cabinet Only— et Each.................................... $245.00
zak Model E-305 Contemporary Cabinet Only— et Each.................................... $140.00

MODEL B-310A THREE-WAY SYSTEM (FIG. F)

chieves full reality in sound reproduction; for amplifiers of 50 atts or more. **Components:** Four B-199A Woofers; two 16-ohm -209, one B-200XA Tweeter Array with N-104 network crossing er 6 db per octave at 400 and 2500 cps. **Frequency Response:** elow 28 to above 20,000 cps; distortion nearly unmeasurable. utstanding transient response. **Enclosure:** 16 cu. ft. infinite affle; 1½″ front panel. Tweeter array isolated. Cavities acoustic- ly lined, eliminating resonance. Mahogany, walnut or blond orina veneer. Size: 36″ w. x 19″ d.x 53″ h.

ozak Model B-310A 3-Way System—Net Each..... $770.00
ozak Model P-310AP Panel Mounted System—Same as above. ly mounted on panel (without enclosure). et Each.................................... $522.00
ozak Model E-310A Cabinet Only—Net Each...... $300.00

MODEL B-400 THREE-WAY SYSTEM (FIG. G)

he only truly fine speaker system in a low-boy cabinet. Superb abinetry, unequalled sound quality. **Components:** Four B-199A oofers, two 16-ohm B-209's, one B-200XA Tweeter Array and -104 crossover network. Electrical characteristics same as odel B310A. Size: 50″ wide, 21″ deep, 34½″ high.

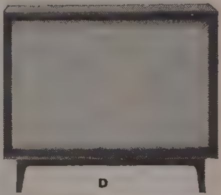
ozak Model B-400 Speaker System—Net Each.... $798.00
ozak Model P-400P Panel Mounted System (Fig. H Opp. Page) -Same as above, only without cabinet; mounted on anel. Net Each.................................... $522.00
ozak Model E-400 Cabinet Only—Net Each....... $330.00

NEW "SPINET" SYSTEMS (FIG. H)

deal limited-space system for stereo applications. Two-way ver- on includes B-199 woofer, B-200X tweeter and crossover; three- ay system has additional B-209 mid-range. Enclosure is rugged ″ veneers for vertical or horizontal placement. **Impedance:** 8 hms. **Power:** 20 watts, min. Size: 14½″ w. x 11½″ d. x 23⅛″ h. **inish:** Specify walnut, mahogany, blond or ebony.

ozak Model B-500 Finished 2-Way System—Net.. $134.50
ozak Model B-500 Unfinished –Net Each......... $124.50
ozak Model B-502 Finished 3-Way System—Net Ea. 209.50
zak Model B-502 Unfinished—Net Each......... 199.50

F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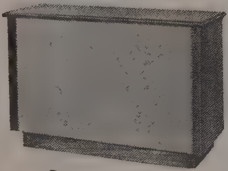
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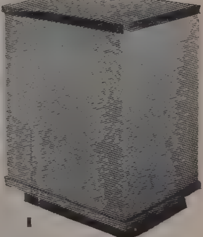
H


I

ECONOMY TWO- AND THREE-WAY SYSTEMS

MODEL B-302A THREE-WAY SYSTEM

Consists of the B-207A Coaxial and a B-209 Mid-range speaker connected through an N-10102 network in the E-300 enclosure. Ideal for 20-watt amplifying system. **Frequency Response:** 40-16,000 cps. **Power Rating:** 15 w., 30 w. peak. **Impedance:** 8 ohms.

Bozak Model B-302A Provincial System (Similar to Fig. C)—Size: 28″ w. x 19″ d. x 21″ h. Net Each.... $295.00
Bozak Model B-302A Contemporary (Fig. I)—Size: 24″ w. x 17″ d. x 30½″ h. Net Each $235.00
Bozak Model B-302A Urban (Similar to Fig. D)— Size: 24″ w. x 20″ d. x 30″ h. Net Each............ $259.50
Bozak Model P-302AP 3-Way System—Components assembled and wired on panel (without enclosure). Net $165.00

B-300 TWO-WAY SYSTEM

System uses same enclosures as B-302, but with B-207A coaxial speaker. Same power, response and size as B-302A system, lacking only some of the mid-range clarity.

Bozak Model B-300 Provincial (Similar to Fig. C)— Net Each.................................... $218.50
Bozak Model B-300 Contemporary (Fig. I)—Net Ea.. $158.50
Bozak Model B-300 Urban (Similar to Fig. D)—Net. 183.00

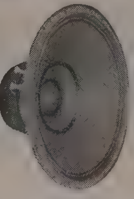
MODEL E-300 ENCLOSURE (FIG. I)

Infinite baffle, 5 cu. ft. size. Accommodates speakers as B-302A system or B-300. ¾″ plywood with lined interior. Removable back. Cutouts for B-207A and B-209. Size: 24″ w. x 30½″ h. x 17″ d.

Bozak Model E-300K Kit—Complete assembly instructions. Specify **L** or **D** (light or dark) grille cloth. Net Each.................................... $42.50
Bozak Model E-300—Fully assembled. Specify Walnut, mahogany or birch veneer finish. Net Each........... $75.00

ALTEC Speakers and Systems

DUPLEX


BIFLEX

803B

DUPLEX LOUDSPEAKERS

Fine coaxial speakers, combining two speakers mounted on a single frame for compactness, point source relation and simplified installation. Permanent viscous compliance damping on bass cone prevents standing waves; driven by edge-wound, double insulated ribbon bass voice coil with extremely deep magnetic gap for high flux density and efficiency throughout its excursion. Design utilizes a heavy Alnico V ring magnet for bass; an edge-wound aluminum voice coil; and a multi-cellular horn for fatigue-resistant, high frequency compliance. A massive dividing network provides smooth 12 db per octave attenuation. External variable frequency shelving control permits balancing the speaker to individual room characteristics.

Altec Lansing Model 605A 15″ Duplex—Precisely engineered speaker with unusually smooth response in the high frequencies and extremely high linearity in the low frequencies. Impedance, 16 ohms. Power: 35 watts; 50 watts peak. Frequency Response: 20-22,000 cps. Voice coil diameter, 3″ (low frequency); 1¾″ (high frequency). Distribution, 90° horizontal; 40° vertical. Magnet Weight: 2¼ lbs. (low frequency); ½ lb. (high frequency). Size: 15⁵⁄₁₆″ dia. x 10″ d. Shipping Weight, 37 lbs., including network. Net Each **$177.00**

Altec Lansing Model 602B 15″ Duplex—Same as above but with 25 watts power, 30 watts peak; 8 ohms impedance; resonance at 42 cps. Depth, 7¼″. Shipping Weight, 23 lbs., including network. Net Each.......... **$143.00**

Altec Lansing Model 601B 12″ Duplex—Impedance, 8 ohms. Power: 20 watts; 30 watts peak. Frequency Response: 40-22,000 cps with resonance at 55 cps. Voice coil, 3″ dia. Depth, 5⅝″. Shipping Weight, 17 lbs., including network. Net Each... **$120.00**

BIFLEX® LOUDSPEAKERS

Feature efficient range far greater than any other type single voice-coil speaker. Unusual compliance design serves as a mechanical crossover in viscous damped concentric mid-cone for better propagation of both lows and highs; driven by an edge-wound aluminum ribbon voice coil with extra deep gap of regular flux density for maximum efficiency. Impedance, 8 ohms.

Altec Lansing Model 415A 15″ Biflex—Frequency Response: 30-14,000 cps; resonance at 45 cps. Power: 25 watts. Depth, 7″. Shipping Weight, 20 lbs. Net Each.......... **$67.00**

Altec Lansing Model 412B 12″ Biflex—Frequency Response: 40-15,000 cps; resonance, 50 cps. Power: 20 watts. Depth, 5⅝″. Shipping Weight, 14 lbs. Net Each.......... **$54.00**

Altec Lansing Model 408A 8″ Biflex—Frequency Response: 60-16,000 cps; resonance, 75 cps. Power: 15 watts. Depth, 3⁷⁄₁₆″. Shipping Weight, 6 lbs. Net Each.......... **$31.00**

803B WOOFER

Specially designed 15″ woofer for use in two-way hi-fi systems and threatre systems. Cone treated for wide range, completely undistorted response. **Frequency Response:** 25-1,600 cps. **Resonance:** 25 cps. **Impedance:** 16 ohms. **Power:** 30 watts. Voice coil, 3″ dia.; magnet, 2.4 lbs. **Size:** 15³⁄₁₆″ dia. x 7″ d. Shpg. Wt., 19 lbs.

Altec Lansing Model 803B—Net Each.......... **$66.00**

802D DRIVER, 811B AND 511B HORNS

802D HIGH FREQUENCY DRIVER

For use with either 811B horn (as illustrated) or 511B horn as tweeter in two-way hi-fi systems. Has domed aluminum diaphragm and edge-wound aluminum voice coil. **Frequency Response:** 500-22,000 cps. **Impedance:** 16 ohms. **Power:** 30 watts. Heavy duty Alnico V magnet, 1.3 lbs. Must be used with N-500D network (for 500 cps crossover) or N-800E network (for 800 cps crossover). **Size:** 4½″ dia. x 3¹¹⁄₁₆″ h. Shipping Weight, 8 lbs.

Altec Lansing Model 802D—Net Each.......... **$63.00**

811B HORN

Cast aluminum sectoral horn, designed for use with the 802D driver. 40° vertical and 90° horizontal distribution pattern. **Frequency Response:** 800 cps (cutoff) to 22,000 cps. Must be used with N-800E network. **Size:** 8⅝″ h. x 18⅜″ w. x 14″ d. Shipping Weight, 11 lbs.

Altec Lansing Model 811B—Net Each.......... **$30.00**

511B HORN

For use with 802D driver and N-500D network. **Frequency Response:** 500 cps (cut off) to 22,000 cps. Distribution similar to 811B. **Size:** 10⅝″ h. x 23⁵⁄₁₆″ w. x 18½″ d. Shipping Weight, 18 lbs.

Altec Lansing Model 511B—Net Each.......... **$39.00**

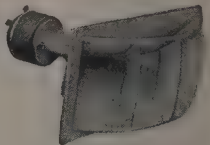
DIVIDING NETWORKS (NOT ILLUS.)

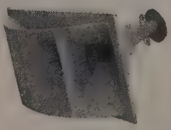
For use with 802D and 811B to provide 800 cps crossover in a two-way hi-fi system. Smooth 12 db/octave slope; detented high frequency shelving control, externally mounted, provides five steps of 1½ db each. **Impedance:** 16 ohms. **Size:** 3¼″ h. x 6″ w. x 2⅝″ d. Shipping Weight, 8 lbs.

Altec Lansing Model N-800E—Net Each.......... **$46.50**

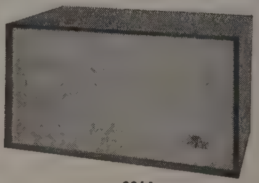
Altec Lansing Model N-500D 500 cps crossover, five attenuation steps of 1½ db each. **Size:** 5¼″ h. x 8″ w. x 2⅝″ d. Shipping Weight, 12 lbs. Net Each.......... **$60.00**

802D


811B


511B

3000B


834A

3000B TWEETER AND N-3000B NETWORK

3000B TWEETER

Combines newly designed sectoral horn and 20-watt efficient driver in one compact unit. For use with N-3000B network to extend the range of single-cone speakers (415 or 412, etc.). 40° vertical and 90° horizontal distribution. **Frequency Response:** 3,000-22,000 cps. **Impedance:** 8 ohms. **Size:** 3³⁄₁₆″ h. x 4⅞″ w. x 4⁵⁄₁₆″ d. Shipping Weight, 1 lb.

Altec Lansing Model 3000B—Net Each.......... **$42.00**

N-3000B NETWORK (NOT ILLUS.)

Provides crossover at 3,000 cps. Continuously variable high frequency shelving control, externally mounted, provides 10 db attenuation. **Impedance:** 8 ohms. **Size:** 2⁵⁄₁₆″ h. x 4⅞″ w. x 2⁵⁄₁₆″ d. Shipping Weight, 1 lb.

Altec Lansing Model N-3000B—Net Each.......... **$22.50**

834A MONTEREY SYSTEM

The latest development in small system design features "big speaker" bass, low distortion and smooth, clean response. Bass reflex construction uses two controlled linear bass speakers, a 3,000 cps crossover and Model 3000B tweeter horn. Handsome cabinet is finished on all sides for horizontal or vertical use. Features extra high power output. **Power:** 20 watts. **Frequency Response:** 40-22,000 cps, guaranteed. **Impedance:** 8 ohms. **Size:** 26″ w. x 14½″ d. x 14″ h. Shipping Weight, 45 lbs.

Altec Lansing Model 834A Monterey System—Specify walnut, blond or mahogany finish. Net Each.... **$174.00**

835A "MONTEREY, JR." (NOT ILLUS.)

Compact, economical speaker system, in rugged bass-reflex design, houses the 402A 8″, controlled linear excursion speaker and the newly designed 2000A direct-radiated cone tweeter. Sturdy construction of tweeter facilitates the use of a simple capacitor as the crossover network instead of a more expensive network. May be used for monophonic or stereophonic installations. Compact design of the enclosure allows it to be used either horizontally or vertically. It may be flush-mounted in a wall or ceiling, used in a console as an integral part of the system, or suspended from a ceiling or fixture. **Frequency Response:** 20-18,000 cps. **Power:** 15 watts. **Impedance:** 16 ohms. **Size:** 23″ w. x 11¼″ d. x 11¼″ h. Weight, 45 lbs.

Altec Lansing Model 835A Monterey, Jr.—Specify walnut, blond or mahogany finish. Net Each.......... **$79.50**

Altec Lansing Model 835A Monterey, Jr.—Unfinished. Net Each.......... **$69.50**

A-7 TWO-WAY SPEAKER SYSTEM (NOT ILLUS.)

Used in more motion picture theatres than any other system; also also highly regarded as the best buy in high fidelity today. Exclusive Altec enclosure features a direct radiating exponential horn combined with a modified bass reflex principle for smoothest response across the entire audible frequency range. Design provides a 90° distribution angle for best sound radiation for theatres up to 1000 seats; also has fine sound in the smallest of Hi-Fi rooms. **Frequency Response:** 35 to 22,000 cps. **Power:** 25 watts continuous. System incorporates: One 803B 15″ woofer for rich bass tones; one 802D high frequency driver coupled with one 811B sectoral horn for low-resonant, clean highs; and one N-800E crossover network with stepped high frequency attenuator for exact adjustment. Designed so that drivers are placed in same vertical plane to achieve exact time phasing and prevent distortion. Magnets are ring-type Alnico V, eliminating stray magnetic fields. **Size:** 30″ w. x 24″ d. x 54″ h., overall. Shpg. Wt., 180 lbs.

Altec Lansing A-7 "Voice of the Theatre" System—Net Each.......... **$299.40**

James B. Lansing Sound, Inc.

LE10

LE30

LX3

NEW LINEAR-EFFICIENCY TRANSDUCERS AND NETWORK

Designed for use in sealed enclosures as small as one cubic foot, or infinite baffles. New cone suspension permits long linear excursions; voice coils centered in intense magnetic field; cast aluminum frames. Wall or ceiling mounting; for front-mounting to baffle. Extreme dynamic range permits use of 30-60 watt amplifiers.

LE8 8″ Extended Range Speaker—2″ voice coil; 6½ lb. magnetic circuit. 8″ dia. x 4⅜″ d. Shipping Weight, 11 lbs.

LE10 Super 10″ Low Frequency Driver—3″ voice coil. 10″ dia. x 4⅛″ d. Shipping Weight, 15 lbs.

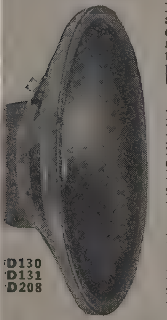
LE30 High Frequency Driver—1¾″ voice coil. 5¹⁄₁₆″ dia. x 2⁵⁄₁₆″ d. Shipping Weight, 4 lbs.

JBL No.	Response, cps	Reson., cps	Power, Watts	Imp. Ohms	Net Each
LE8	30-15,000	37	20	16	$57.00
LE10	Up to 2 kc	15	30	16	52.80
LE30	From 1 kc	....	30	16	52.80

LX3 DIVIDING NETWORK

For use with LE10 and LE30. **Crossover:** 1 kc. **Impedance:** 16 ohms, input and output. **Attenuation:** 12 db/octave (with LE30); continuously variable control. **Size:** 3¼″ x 3¼″ x 2¾″. Shpg. Wt., 3 lbs. Net Each..... $17.40

EXTENDED RANGE SPEAKERS


D130
D131
D208

Linearly flat response. The edge-wound aluminum ribbon voice coil and 4″ dural center dome stiffen the piston assembly for crisp bass, smooth, extended highs. Curvilinear cone makes possible shallow piston assembly for better distribution of highs.

D130 15″ SPEAKER

Excellent alone or as a low frequency unit in a divided network system. Four-inch voice coil dia. **Power Input:** 25 watts. **Impedance:** 16 ohms. **Resonance:** (Free Cone) 37 cps. **Field:** Permanent magnet. **Size:** 15⁵⁄₁₆″ O.D., 5⅝″ deep. Shpg. Wt., 23 lbs. Net Each............... $84.00

D131 12″ SPEAKER

Four-inch voice coil diameter. **Power Input:** 25 watts. **Impedance:** 16 ohms. **Resonance:** (Free Cone) 39 cps. **Field:** Permanent magnet. **Size:** 12⅛″ O.D., 5″ deep. Shpg. Wt., 21 lbs. Net Each............... $78.00

D208 AND D216 8″ SPEAKERS

Edge-wound aluminum ribbon voice coil, 2″ diameter. **Power Input:** 12 watts. **Imped.:** 8 and 16 ohms. **Resonance:** (Free Cone) 55 cps. **Field:** Permanent magnet. **Size:** 8¼″ O.D., 2⅞″ d. Shipping Weight, 6 lbs.
No. D208 (8 ohms) or **No. D216** (16 ohms)—Net Each................ $29.70

D123

D123 12″ SPEAKER

Extremely shallow and compact so it can be mounted between studding, flush with surface of wall. Three-inch voice coil dia. **Power Input:** 20 watts. **Impedance:** 16 ohms. **Resonance:** (Free Cone) 40 cps. **Field:** Permanent magnet. **Size:** 12⅛″ O.D., 3⅝″ deep. Shipping Wt., 12 lbs. Net Each................. $59.40

LOW FREQUENCY DRIVERS

130A
130B

130A AND 130B 15″ LOW FREQUENCY DRIVERS

These offer precision low end reproduction. Designed for use in the Signature Divided Network Systems, they are similar to the D130 (at left) Extended Range Speaker units, except that the 130A and 130B have copper ribbon voice coils. For use in systems with crossover at 1200 cps.

Voice Coil Diameter: 4 inches. **Power Input:** 25 watts. **Resonance:** (Free Cone) 36 cps. **Outside Diameter:** 15⁵⁄₁₆″. **Depth:** 5⅝″. Both the 130A and the 130B have a Permanent Magnet field. **Impedance:** 16 and 32 ohms. Shipping Weight, 23 lbs.

No. 130A (16 ohms) or **No. 130B** (32 ohms)—Net Each.......... $81.00

150-4 SERIES 15″ LOW FREQUENCY DRIVERS

150-4
150-4C

These drivers are made with a straight-sided cone and a 4-inch voice coil for a piston assembly of the maximum rigidity. This near-ideal piston form assures clean, well-defined bass. Voice coil is edge-wound copper-ribbon type.

150-4 Series drivers are designed for use in systems with a 500 cycle crossover. **Voice Coil Diameter:** 4 inches. **Power Input:** 30 watts. **Resonance:** (Free Cone) 27 cps. **Outside Diameter:** 15⁵⁄₁₆″. **Depth:** 6″. The 150-4 has an impedance of 32 ohms; the 150-4C has an impedance of 16 ohms. Both have a Permanent Magnet field. Shipping Weight, 25 lbs.

No. 150-4 (32 ohms) or **No. 150-4C** (16 ohms)—Net.. $114.00

HIGH FREQUENCY DRIVERS, EXPONENTIAL HORNS, KOUSTICAL LENSES, NETWORKS

75DLH

3755

37-500

537-509

H5039

075

5DLH DRIVER-HORN-LENS HIGH FREQUENCY ASSEMBLY

s consists of 14 separate elements; distributes sound smoothly r a 90° solid angle. Designed for 1200 cps crossover. **Driver pedance:** 16 ohms. **Power Input:** 25 watts above 1200 cps. **lex of Refraction:** 1.3. **Field:** Permanent magnet. **Horn Throat meter:** 1 inch. **Mounting Hole Diameter:** 5⅜″. **Overall ngth:** 11½″. Shipping Weight, 12 lbs.
. 175 DLH Assembly—Net Each................ $124.50
. 175 Driver—Driver only. Net Each...............$93.00

375 HIGH FREQUENCY DRIVER

sed on theater equipment design. Provides unequaled smooth ponse above 300 cps. Voice coil and aluminum diaphragm embly has a diameter of 4″. **Impedance:** 16 ohms. **Power Input:** watts, above 300 cps. **Field:** Permanent magnet. **Flux Density:** er 20,000 gauss. **Size:** 7″ dia., 5⅜″ deep. Shipping Weight, lbs.
. 375 Driver—Net Each...................... $198.00

537-500 HORN-LENS ASSEMBLY

round exponential horn and Koustical Lens assembly for use h the 375 Driver. **Horn:** 12″ long; 2″ throat diameter. Weight, lbs. **Lens:** Composed of 19 separate elements; distributes sound r a 70° solid angle. Absorbs less than 1% of total power transtted to the air. **Lens Size:** 13½″ diameter; 3¾″ long. Weight, lbs. Combined length of the assembly is 17″. Combined shipping ight, 37 lbs.
. 537-500 Horn Lens Assembly—Complete. Net Ea. $87.00

H5039 RECTANGULAR HORN

me as in 537-509 Assembly. Used with 375 driver.
. H5039 Horn—Shipping Weight, 9 lbs. Net Each.. $42.00

537-509 HORN-LENS ASSEMBLY

Has an exponential horn with a rectangular cross-section which permits its use with the serpentine Koustical Lens. Provides wide horizontal and narrow vertical coverage, minimizing ceiling and floor reflections. **Horn:** 12″ long with 2″ round throat and 9″ x 6″ rectangular mouth; weighs 9 lbs. **Lens:** 20″ wide, 6¾″ high, 4½″ deep; weighs 4 lbs. Acoustical absorption is less than 1%. Combined length of assembly, 16½″. Combined shipping weight, 17 lbs.
No. 537-509 Horn-Lens Assembly—Complete. Net Ea.. $84.00

075 HIGH FREQUENCY RADIATOR

Distortionless, smooth response from 2500 cps up. **Power Input:** 20 watts above 2500 cps. 16 ohms impedance. 3³⁄₁₆″ dia., 3¼″ deep. Shipping Weight, 6 lbs.
No. 075 HF Radiator—Net Each........................ $59.40

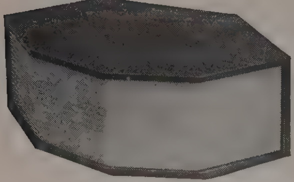
SIGNATURE DIVIDING NETWORKS (NOT ILLUS.)

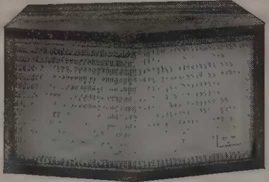
Attenuation: 12 db per octave. **Input Impedance:** 16 ohms. **Output Impedance:** 16 ohms, except No. N2600, switchable 16 or 32 ohms. **Size:** N1200, 4¾″ x 6″ x 6¼″; N500, 6″ x 8″ x 6″; N2600, 4¾″ x 6″ x 3½″; N7000, 3¼″ x 3¼″ x 2¾″.

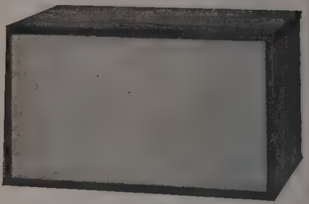
JBL No.	Crossover	Attenuation Control	Shpg. Wt.	Net Each
N400	500 cps	3-position switch	9 lbs.	$76.50
N500	500 cps	1 db step, strapping bars	16 lbs.	84.00
N600	600 cps	3-position switch	9 lbs.	54.00
N1200	1200 cps	3-position switch	9 lbs.	35.25
N2600	2500 cps	Variable	3¾ lbs.	24.60
N7000	7000 cps	Variable	3 lbs.	20.40

JansZen* High Fidelity Speakers

PRODUCTS OF NESHAMINY ELECTRONIC CORPORATION


Model 130


Model 65


Model Z-400

MODEL 130 ELECTROSTATIC MID- AND HIGH-FREQUENCY SPEAKER

The JansZen Model 130 mid- and high-frequency loudspeaker is a wide range electrostatic transducer for use in high fidelity systems designed for maximum realism of reproduction. Its frequency response extends from 500 cycles to beyond 30,000 cycles per second. When installed with auxiliary components of comparable quality, it will give the illusion of listening directly to the program material rather than through the medium of a reproducing chain. Its extremely smooth power response insures the superb reproduction of transients, producing sound of unrivaled purity, and reducing needle scratch to near-inaudibility. Its patented push-pull, constant charge design insures high power output, high efficiency, and extremely low distortion.

The complete loudspeaker is composed of four electrostatic radiators, an audio signal stepup transformer, a high voltage bias supply, high-pass filter, and an acoustically treated cabinet. It is available only as an integrated unit.

The Model 130 is available either as an eight—or sixteen-ohm speaker. Recommended maximum audio input is 50 watts rms (20 volts across 8 ohms, 28 volts across 16 ohms). Required power input is 117 volts, 50-60 cycles, AC. Power consumption is about 2 watts. The performance of the loudspeaker is unaffected by normal line voltage variations.

When woofers are used that have a smooth response below 1000 cps and a significantly high or peaky response above that frequency, a rolloff network should be applied to the woofer. The use of a woofer whose smooth low frequency response does not extend to 1000 cps requires the addition of a mid-range speaker, which should be installed with suitable crossover networks to yield a smooth response to 1000 cps, and a rolloff above that frequency. Because of their degrading effect on transient response and the possibilities of impedance mismatching, the use of the multiple crossover networks is not considered as desirable as the use of woofers that do not require such networks. **Size:** 22″ wide, 13″ deep, 7¼″ high. Weight: Net, 13 lbs., Shipping, 16 lbs.

JansZen Model 130-M†—Mahogany finish. Net Ea.. $\$184^{00}$
JansZen Model 130-B†—Birch finish. Net Each...... **$179.00**
JansZen Model 130-W†—Walnut finish. Net Each... **188.00**
JansZen Model 130-UA†—Utility (flat black) finish.. **169.00**
†Add 8 or 16 to this model number to indicate impedance desired.

MODEL 130-U ELECTROSTATIC MID- AND HIGH-FREQUENCY SPEAKER (NOT ILLUS.)

The same fine speaker designed specifically for custom installation in cabinets, wall or bookcase. Cover the front with grille cloth—nothing protrudes. **Size:** 23½″ wide x 10″ deep x 7¼″ high. Weight: Net, 13 lbs.; Shipping, 16 lbs.

JansZen Model 130-U† -Square cabinet; utility finish (flat black). Net Each........................ $\$161^{00}$
†Add 8 or 16 to this model number to indicate impedance desired.

MODEL 65 ELECTROSTATIC SPEAKER

Lower cost version of the famous JansZen Model 130, long recognized by audiophiles and research organizations as the most nearly perfect loudspeaker. This model features the same, smooth sound as the Model 130. Distortion-free, smooth, power response with superb reproduction of transients. In addition, its broad sound source makes it ideal for either stereo or monophonic reproduction. The heart of the Model 65 is two push-pull electrostatic radiating elements identical in construction and performance to that of the four radiators in its larger counterpart. The use of the patented JansZen electrostatic principle, employing totally sheathed and insulated conductors to eliminate all possible electrical arcing, makes it possible to obtain very low distortion with high per unit area output. Frequency response is well beyond the limits of audibility; very smooth power response reduces needle scratch and tape hiss to near inaudibility.

When added to your present woofer, the Model 65 will add octaves of harmonics that give realism and life to music; music without annoying cone breakup, horn coloration or anything between the listener and his enjoyment. When compared with conventional horn and cone tweeters or with the JansZen Model 130, this new unit is rivalled only by the 130.

Frequency Response: 700 cps to beyond audibility. **Type Crossover Network:** LRC high-pass filter. **High Frequency Dispersion:** 60°. **Distortion:** Less than 0.5% total harmonic distortion at 50 watts input below 10,000 cps. **Impedance:** 8 ohms. **Maximum Input:** 20 volts rms (50 watts). **Power Required:** 2 watts, 117 v. AC, 50-60 cps. **Size:** 12¾″ w. x 8½″ d. x 6¾″ h.

JansZen Model 65-M—Mahogany finish. Net Each.... $\$89^{50}$
JansZen Model 65-B—Maple (Birch) finish. Net Each. **$89.50**
JansZen Model 65-W—Walnut finish. Net Each....... **91.50**
JansZen Model 65-UA—Utility Dull Black finish. Net. **86.00**

NEW MODEL Z-400 SPEAKER SYSTEM

Reproduces music accurately and naturally through skillful matching of the famous JansZen Mid/High Electrostatic tweeter and a specially engineered 11″ woofer, Model 350. Devoid of all false resonances, it features almost immeasurable transient and harmonic distortions at any listening level. Amazing response, uniform 30-30,000 cps is achieved in an unusually compact design. Two-element tweeter design behaves like an ideal acoustic piston for uniform response. Totally enclosed woofer in fiberglas-filled baffle provides deep response with a smooth roll-off above 2,000 cps; cone controlled by 3¼ lb. magnet structure to handle powers up to 100 watts on music. Enclosure is finished on all sides for horizontal or vertical placement; grille cloth is natural Irish linen. Complete with crossover and power input cord for 117 v. AC, 50-60 cps. **Impedance:** 8 ohms. **Size:** 26″ w. x 13¼″ d. x 15″ h. Shipping Weight, 54 lbs.

JansZen Model Z-400-M (Mahogany), **Z-400-OW** (Oil Walnut), **Z-400-W** (Dark Walnut) or **Z-400-B** (Maple)—
Net Each.. $\$149^{50}$
JansZen Model Z-400-U—Unfinished birch. Net Ea.. **$134.50**

MODEL Z-300 SPEAKER SYSTEM

Unique system is ideally suited (in pairs) for stereophonic reproduction or (singly) for monophonic listening. Carefully matched tweeter and woofer are designed to give a virtually unified, yet spacious sound source, combining rich, deep bass with clear, uncluttered mid-range and sweet highs that will please the most sophisticated ear. Response is smooth and free from distortion. The design is compact for limited space applications.

THE TWEETER

Utilizes two JansZen push-pull electrostatic radiators similar to those used in the Model 65 tweeter. These are set in an arrangement to obtain maximum dispersion and broad sound source. Near-perfection acoustical properties are achieved by this patented design; free from strident or screechy response without peaks or distortion ascribed to conventional tweeters. The smooth, sweet sound extends beyond audibility without annoying break-up to cause listening fatigue.

THE WOOFER

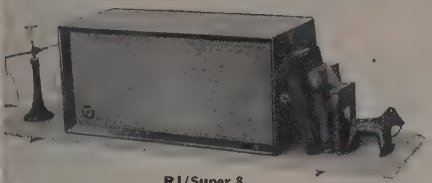
Model 350 woofer is used as a careful match for the tweeter in its own fiberglas-filled, 2.2 cu. ft. enclosure. Its long voice coil structure and very flexible suspension makes it possible to handle high power with very low harmonic distortion. Characterized by extra deep bass handling capabilities and smooth mid-range response, transient distortion is avoided by use of a very light cone, carefully controlled over its operating range. A mechanical roll-off above 2,000 cps eliminates the need for a crossover network. Coloration of the sound is avoided by an extremely linear and smooth response curve resulting in an almost exact replica of the input signal.

Power Handling Capability: Up to 100 watts peak on complex musical content. **Frequency Range:** 30 to 30,000 cps (woofer, 30-2,000 cps; tweeter, 700 to beyond 30,000 cps). **High Frequency Dispersion:** 60°. **Crossover Networks:** LRC high-pass filter for tweeter only; mechanical roll-off on woofer. **Impedance:** 8 ohms. **Power Cord Input:** 2 watts, 117 v. AC, 50-60 cps. **Guarantee:** Complete loudspeaker, 1 year; electrostatic radiators, 2 full years. **Size:** 20″ w. x 13″ d. x 28″ h.

JansZen Model Z-300-M—Mahogany finish. Net Each.................. $\$199^{75}$
JansZen Model Z-300-B—Maple (Birch) finish. Net Each.................**$199.75**
JansZen Model Z-300-W—Walnut finish. Net Each...................... **203.50**

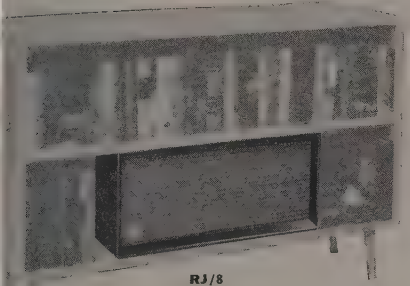
*INCLUDING DESIGNS BY ARTHUR A. JANSZEN.

Hi-Fi Speaker Enclosures, System



RJ/Super 8

The most imitated (but never equalled) enclosure design ever produced; utilizes a unique, patented internal design for smooth, wide range response. Using a Helmholtz resonator with controlled "Q", these enclosures deliver bass response down to 50 cps and below without boom or honk; all in a cabinet only slightly larger than the speaker used. Bass response "Q" is controlled by careful placement of the speaker mounting board; this provides essentially air-loading of the speaker and damping by the enclosure. Undistorted mid-range response is assured by the use of heavy acoustical padding to control back-waves; stops interference and delivers cleaner middle notes. Clear, sharp high frequencies are directly radiated without obstructions or diversions. Appraised by experts and laymen alike, these units outperform enclosures more than three times their size. Constructed of triple rigid laminate board, units are made in the tradition of the finest furniture. Finishes are hand-rubbed mahogany, walnut and blond as well as unfinished birch. Legs on floor models are tapered type with handsome, brass ferrules.



RJ/8

MODEL RJ/SUPER 8 SPEAKER SYSTEM

Complete speaker system incorporates professional-like response and limited-space functionalism. The cabinet is the famous RJ/8, designed for tabletop or single-shelf mounting in bookcase; available in blond, mahogany or walnut hand-rubbed finishes as well as unfinished birch. The carefully installed speaker is the famous Wharfedale Super 8/FS/AL, a full range 8″ unit with aluminum voice coil for smooth response up to 15,000 cps. **Cone Resonance:** 55-65 cps. **Flux Density:** 13,000 gauss. **Impedance:** 8-10 ohms. **Power:** 4 watts. **Cabinet Size:** 10″ d. x 11″ h. x 23½″ l. Shipping Weight, 23 lbs.

RJ/Super 8 Unfinished Birch—Net Each............ $\$50^{50}$

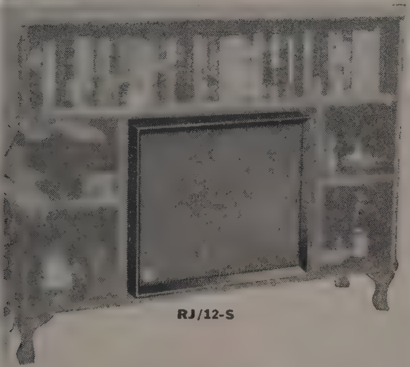
RJ/Super 8 Finished—Specify walnut, mahogany or blond. Net Each..$59.50

MODEL RJ/8 ENCLOSURE

Ideal unit for limited space stereo or monophonic systems; fits easily in a single-shelf of a bookcase for built-in appearance. Accepts any high fidelity 8″ speaker. Compact size permits easy mobility and positioning to allow for room acoustics; particularly important in stereo applications. Incorporates all the famous R-J features: Frictionally damped, deep bass response; directly radiating high response; triple laminate board construction to guard against resonances. Any 8″ speaker installs easily; ideal for wide range units such as Wharfedale Model 8/FS/AL. Undistorted mid-range response achieved through use of heavy padding to eliminate back-waves. Finished units are hand-rubbed for the look of fine furniture. **Size:** 10″ d. x 11″ h. x 23½″ l. Shipping Weight, 19 lbs.

RJ/8 Unfinished Birch—Net Each.................. $\$28^{50}$

RJ/8 Finished—Specify walnut, mahogany or blond. Net Each..$37.50



RJ/12-S

MODEL RJ/12-S ENCLOSURE

Double bookshelf sized version of R-J's finest engineering. Fits easily inside a double bookshelf, as illustrated, on top of cabinets, or similar placements. Accommodates speakers up to 12″ diameter such as Wharfedale Model 12/FS/AL for full range response. Compact design is only slightly larger than the speaker to be enclosed, yet delivers a response that compares favorable with much larger units. Frictionally damped bass, directly radiated highs, and smooth mid-range response free from back-waves assure the finest in sound. Two of these units make the perfect stereo combination for fairly limited space applications. Rigid construction is completed in fine, hand rubbed finishes or unfinished birch wood, with contrasting grille cloth. **Size:** 10″ d. x 24″ h. x 21″ l. Shipping Weight, 32 lbs.

RJ/12-S Unfinished Birch—Net Each............... $\$38^{50}$

RJ/12-S Finished—Specify walnut, mahogany or blond. Net Each..$49.50

MODEL RJ/12-F ENCLOSURE

Handsome, floor standing enclosure for use with 12″ speakers; has neat, tapered legs with brass ferrules to enhance contemporary interiors. When used in stereo applications, the two units are easily movable to permit proper adjustment for room acoustics. Often imitated, but never equaled for performance, it features deep bass response that is matched only by much larger systems. Mid-range and treble response is equally unsurpassed. Triple laminate construction throughout. **Size:** 20″ h. x 16″ d. x 20″ l. Shpg. Wt., 37 lbs.

RJ/12-F Unfinished—Net Each................. $\$45^{00}$

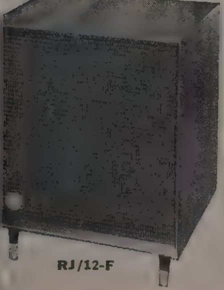
RJ/12-F Finished—Specify walnut, mahogany or blond. Net Each..$56.00

MODEL RJ/15 ENCLOSURE

Gives you the best response available with your 15″ speaker in a compact enclosure. Employing the famous R-J patented baffling principles, this design delivers the entire range of your big speaker: Deep, rich basses; clear, clean highs; and smooth, undistorted mid-range response. Handsome exterior is available in walnut, mahogany or blond, hand-rubbed finishes; or, unfinished birch; legs are tapered with brass ferrules. Triple laminate construction throughout. **Size:** 16″ d. x 20″ h. x 20″ l. Shipping Weight, 38 lbs.

RJ/15 Unfinished Birch—Net Each............. $\$45^{00}$

RJ/15 Finished—Specify walnut, mahogany or blond. Net Each..$56.00



RJ/12-F

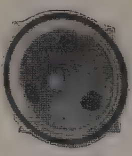
RJ/15

Speakers, Recorders, Accessories

W/B STENTORIAN LOUDSPEAKERS

12″ DUPLEX

HF1214


HF1012U

HF812U

12″ CONCENTRIC DUPLEX SPEAKER

Power: 15 watts. 11½ lb. Alcomax magnet system. Built-in crossover network, 3000 cps. Two 1½″ voice coils. Shipping Wt., 24 lbs.

W/B 12″ Duplex Speaker— Net Each.................. $\$119^{00}$

8″ UNIVERSAL IMPEDANCE SPEAKER

Same as HF1012U except for following: **Response:** 50-12,000 cps. **Bass Resonance:** 65 cps. **Impedance:** 4, 8, 16 ohms. 1″ voice coil; four mounting holes on 8⁹⁄₁₆″; 7″ cutout. Shipping Weight, 4½ lbs.

W/B Model HF812U Speaker— Net Each................ $\$14^{95}$

12″ EXTENDED RANGE SPEAKER

Response: 25-14,000 cps. **Bass Resonance:** 39 cps. **Impedance:** 16 ohms. **Power:** 15 watts. 5⅓ lb. Alcomax magnet system; 14,000 gauss; 1½″ voice coil. W/B Cambric cone and mid-range stabilizers; die-cast chassis: 4 holes on 11¾″ dia. Shipping Weight, 13 lbs.

W/B Model HF 1214 Speaker— Net Each .... $\$52^{50}$

10″ UNIVERSAL IMPEDANCE SPEAKER

Response: 30-14,000 cps. **Bass Resonance:** 35 cps. **Impedance:** 4, 8, 16 ohms. **Power:** 10 watts. 2 lb. Alcomax magnet system; 12,000 gauss; 1″ voice coil. W/B cambric cone with mid-range stabilizers; die-cast chassis. Four mounting holes, 10²⁵⁄₃₂″. 9¼″ cut-out. Shipping Weight, 6½ lbs.

W/B Model HF 1012U Speaker—Net Each........... $\$18^{95}$

W/B Model HF 1016U Speaker—Same as HF1012U but 30-15,000 cps response; 15 watts power. Net Ea. $\$36^{50}$

NEWCOMB STEREO TAPE RECORDER

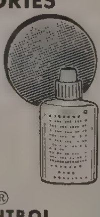
MODEL SM-310

Portable, professional tape recorder with fully synchronous drive motor. "Joy" stick control of fast wind (3600′ in two minutes), rewind, record or playback. Partial stick movement gives slower tape speed. Precision ground, cool-running capstan and mechanical filters give flutter and noise figures that are really low. Telescoping "Joy" stick may be adjusted for convenient operating length. To prevent accidental erasure, the stick is interlocked with the function-selector knob so that two-hand setting of controls is required to record. Speeds of 7½″/sec. and 3¾″/sec. are set with a push button that automatically provides proper compensation. All preamplification stages for both recording and playback are built into the SM-310. Two inputs with mixing controls provided for each channel. Illuminated recording level meters, arranged pointer-to-pointer, facilitate comparison of both channels at a single glance. Requires only headphones and microphones for on-the-spot recording and monitoring. Low impedance microphones may be matched by use of Newcomb hum-free plug-in transformers. **Signal-to-Noise Ratio:** Better than, 50 db at 7½″/sec.; 45 db at 3¾″/sec. **Tape Speeds:** 7½″/sec. and 3¾″/sec. **Wow and Flutter:** Less than .2% at 7½″/sec.; .25% at 3¾″/sec. **Heads:** Inline, record/playback head, separate half-track erase heads. **Reel Size:** 10½″ maximum, no minimum. **Frequency Response:** ± 2 db, 30-15,000 cps at 7½″/sec.; ± 3 db, 40-10,000 cps at 3¾″/sec. (based on standard No. 111 tape). **Equalization:** Standard NAB. **Output:** 1.3 volts (approx.) from cathode follower, each channel. **Inputs:** (4) Two high level inputs and two microphone (wired for use with Newcomb Hum-free plug-in transformers for conversion of mike inputs to low impedance). **Outputs:** (3) One each channel and 1 monitor. **Power Required:** 90 watts, 117 v. AC, 60 cps. **Size:** 12¾″ x 16¾″ x 9½″. Weight, 34 lbs.

Newcomb Model SM-310 Stereophonic Tape Recorder Net Each .... $\$499^{50}$

DEXTER PHONO ACCESSORIES

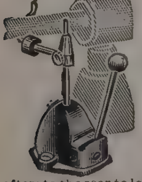
LEKTROSTAT® RECORD CLEANER KIT



The professional way to clean records and end static. Cleans inside the grooves with a non-gumming anti-static detergent. A soft, firm, velvet applicator that penetrates into the grooves with only a light pressure; sweeps dust and foreign matter out. Detergent comes in polyethylene bottle that won't leak; only a few drops are needed to eliminate static and clean the record. Handy plastic pouch keeps applicator clean.

Lektrostat® Record Cleaning Kit— Net Each..... .... $\$2^{00}$

DEXTRAFIX® TONE ARM CONTROL



Designed for use on turntables and changers with manual operation. Prevents accidental damage to records, stylus, cartridge or tone arm. Enables you to place stylus in the lead-in groove accurately and gently. At the end of play, you can lift the arm up as gently and accurately as the finest automatic changer does. The stylus cannot touch the record until the lift arm is lowered for play. Also facilitates cueing at any point on the record. Once you set the lift for your turntable or changer, you only move the one lever thereafter; to the rear to lower the arm; forward to raise the arm.

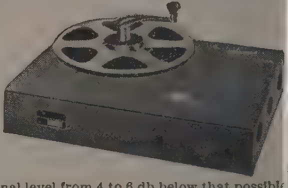
Dextrafix® Tonearm Control—Net Each............... $\$4^{95}$

MICROTRAN TAPE ERASER

Magnetic tape bulk eraser eliminates recorded signals and noise from magnetic tape below level of standard erase heads. Spindle mounting of reel permits rapid, thorough coverage without missed spots. Usable with magnetic tape reels from 5″ through 10″ diameter. May also be used for demagnetizing record-playback and erase heads, tools, and other metal objects. Baked enamel finish. **Size:** 3″ x 5″ x 8″. Weight, 8½ lbs.

Microtran Model HD-11 Magnetic Tape Eraser—Net. $\$23^{38}$

LIBRASCOPE MAGNETIC NOISERASER®



The Noiseraser® is a carefully engineered magnetic circuit which removes prior recordings and random signals from entire reels of tape in a few seconds. Does not add unwanted signals. **Note:** It is recommended that the standard erase head be by-passed when using this unit, since tape which has been bulk degaussed has a signal level from 4 to 6 db below that possibl
with standard erase heads; it is also recommended that new tape
be degaussed to remove all incidental signals. Simple to use: Insert
removable spindle and place tape on Noiseraser®; using handle
rotate tape 1 to 1½ revolutions at a rate of about 2″/sec.; turn ove
tape and repeat; remove tape slowly from Noiseraser® whil
magnetic field is still active. After this quick, simple operation, th
tape is completely degaussed and ready for use. Adapter hubs fo
other than ⁵⁄₁₆″ tape reels are available (i.e., for NAB reels)
Operates on 110-120 v. AC, 60 cps.

Librascope Model N-14 (Illustrated)—For tape up to 1″ wide o
reels up to 14½″ diameter. 13″ x 17″ x 3″. Shipping Weight, 34 lbs. Net Each.............................. $\$86^{7}$

Librascope Model N-7 (Not Illustrated)—For tape up to 1″ wid
on reels up to 10½″ diameter. 7″ x 15″ x 3″. Shipping Weight, 18 lbs. Net Each.............................. $\$58^{50}$

Librascope Model N-HF (Not Illustrated)—For tape up to ¼
wide on reels up to 10½″ diameter. Size: 7¾″ x 4¾″ x 3¼″. Shipping Weight, 8 lbs. Net Each .... $\$39^{9}$

Librascope Model N-2 (Not Illustrated)—For bulk video an
telemetering degaussing. Handles tapes up to 2″ widths, 10½
through 14½″ reels. Includes circuit breaker, magnet switch
turntable motor drive and thermal overload protection. Heav
duty 4-conductor, 6-ft. power cord supplied. For 110-120 v
3-wire single phase 60 cps service. Size: 16″ x 11″ x 4⅝″. Shipping Weight, 55 lbs. Net Each........... $\$595^{0}$

Librascope Reel Adapter—For NAB reels. Net Each....**$2.5**

ELECTRICAL CHEMICAL SPECIALTY

LONG LIFE® LIQUIDS

Long life cleaner, lubricant and tape conditioner. Cleaner remove
dirt, accumulated oxides and other matter from magnetic head
capstan and pressure roller. Lubricant lubricates heads and guide
with polydimethyl silicone. Tape conditioner reconditions the tap
automatically as it is played on the tape recorder. Results i
improved high frequency response, less frequency modulation dis
tortion, freedom from tape squeal and quieter operation. Package
in squeeze-feed, unbreakable plastic bottles with automatic capil
lary applicators. Tape conditioner fluid and tower-like applicato
apply silicone plasticizer solution to tape as it plays.

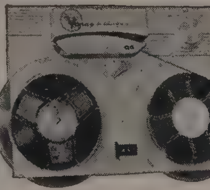
Long Life® Master Kit—Contains one 2 oz. bottle of cleaner, on
2 oz. bottle of lubricant, one 2 oz. bottle of tape conditioner, tw
capillary wick applicators, and one tower applicator. Complete instructions are included. Net Each............... $\$3^{9}$

Replacement Bottles of Long Life®— Cleaner lubricant and tape conditioner in 2 oz. bottles. Net Each Per Bottle..... 98

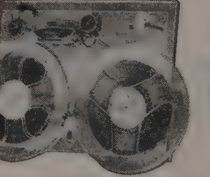
Professional Long Life®—16 oz. glass bottles of cleaner, lubricant or tape conditioner. Net Each Per Bottle...... $\$3^{9}$

Viking Tape Recorders, Accessories

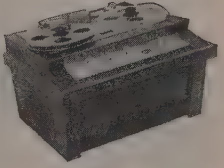
95" DECK WITH TWO RP62VU'S



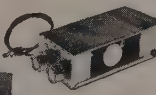
'85" DECK



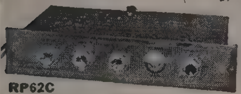
"75" DECK



W3SX



PB60



RP62C

"95" SERIES TAPE DECKS

zged, heavy-duty tape transport for commercial, broadcast, other critical applications. Designed for conventional relay k mounting. May be used with one or more suitable preplifiers (Viking RP62VU record/playback preamplifier recomided) for single or dual channel recording and playback. Will ommodate up to four heads; any combination of full-track, -track, and quarter-track heads may be obtained. Handles to 10½" reels. **Three Motors:** Hysteresis synchronous "flutter r" capstan drive; two six-pole induction types for takeup and ply. Rewind and fast-forward time of 70 seconds for 2400 feet ½" reel). Resettable three digit counter. Long term speed ulation is under 0.2%. **Four telephone type controls:** Reel size 7", 10½"); Tape Speed; Play/Cue; Fast Forward/Rewind. ut connector for switches permits remote control of Play/Stop Fast Forward/Stop/Rewind functions. Additional connector vides circuits for integrated control of associated electronic ipment. Photoelectric fail-safe device automatically removes ver from unit if tape breaks or is removed from heads. A transent tape section can be used to initiate shut off, facilitating ip programming and fast cueing. **Frequency Response:** 30-00 cps at 7½"/sec. **Signal-to-Noise Level:** 55 db. **Wow and tter:** 0.1% rms at 7½"/sec. **Speeds:** 7½"/sec. and 15"/sec.; 3¾"/sec. and 7½"/sec. **Power Required:** 150 watts nominal, v. AC, 60 cps. Shipping Weight, 50 lbs.

ing Model 95FTR Full-Track Monophonic ord/Playback—Net Each $516.50

ing Model 95R Half-Track Monophonic—Half-ck laminated erase and record/play heads. Net Ea. $487.65

ing Model 95ES Half-Track Inline Stereo—Half-track inline se and record/play heads for record and playback of stereo or nophonic tapes. t Each $513.25

ing Model 95ESQ Half-Track Inline Stereo Record/Play, arter Track Stereo Play—Same as above with added inline rter-track heads for playback of 4-channel tapes. t Each $546.50

"85" SERIES TAPE DECKS

pe deck designed for use in home music systems. Flutter-filter stan drive. Separate motor for takeup, fast forward and footage inter drive. Speed change selection on front panel for 3¾"/sec., 7½"/sec. Dual rotary type tape motion controls; forward, p, and edit functions on inner knob. Tape may be handled hout spilling or breaking with mechanical interlock feature. All dels equipped with long-wearing laminated heads, tapelifters, -resonant pressure pads, improved rewind actuating mecham, and an automatic tape runout switch. Head bracket shift permit the use of quarter-track heads. Use with Viking record/yback amplifiers for recording and playback purposes. Other B tape equalized amplifiers may be used for playback only. odized aluminum panels, head covers and controls. Unit mounts tically or horizontally. **Frequency Response:** 30-14,000 cps, db. **Signal-to-Noise Level:** 55 db. **Wow and Flutter:** Less than % at 7½"/sec. **Speeds:** 7½"/sec. and 3¾"/sec. **Heads:** Half-ck record/play laminated, .00016" gap; quarter-track heads inated, .00009" gap; erase heads, half-track and double gap. **tortion:** Less than 1%. **Power Required:** 110 v. AC, 60 cps. cps available, **$2.00** additional. **Size:** 9½" x 13" x 5" d.

ing Model 85R Monophonic Record/Playback—lf-track erase/record head. Net Each $119.00

ing Model 85RQ Monophonic Erase/Record, Stereo Playback With monophonic erase, record/play heads, and ine quarter-track stereophonic head. Net Each $147.50

ing Model 85ES Monophonic-Stereo Erase/Record/Playback Inline half-track erase and record/play heads. Provides indedent erase/record of either channel, and stereo/se/record. Net Each $147.00

ing Model 85ESQ Monophonic-Stereo Erase/Record/Playck—Same as above except quarter-track stereo ds included for playback of 4-track tapes. Net Ea. $172.00

"75" SERIES TAPE DECKS

Available in a wide variety of interchangeable head assemblies for monophonic and stereo record/playback. Short-gap, double winding heads have excellent response and high signal-to-noise ratio. For playback, deck requires preamp with low level tape input and NAB equalization. For recording, deck requires Viking RP62C or equivalent matched record-playback amplifier. Features "flutter-filter" belt drive. Split-knob, positive shift for record-play, fast forward and rewind. **Frequency Response:** ±3 db, 40-14,000 cps at 7½"/sec. **Wow and Flutter:** 0.2% rms. **Speeds:** 3¾" and 7½"/sec. selected on front panel. **Power Required:** 115 v. AC, 60 cps; 50 cps models also available. **Size:** 12⅛" x 8¾" x 5" d. Weight, 11 lbs.

Note: All models may be modified through addition of heads and brackets to provide same functions as other models listed. Quarter-track inline heads also available; however, the "75" Series deck accommodates a maximum of three heads.

Viking Model FF75 Monophonic Playback—Has single half-track head for monophonic playback. Net Each... $66.00

Viking Model FF75R-LP Monophonic Record/Playback—Has half-track record/playback head and erase head, tapelifter and pressure pads. Net Each $78.50

Viking Model FF75SR Monophonic Erase-Record, Stereo Playback—Inline heads for stereo play, monophonic erase and record/playback heads. Tapelifter and pressure pads. Net Ea. $113.00

Viking Model FF75ES Inline Stereo Erase-Record and Playback—Has inline record/playback heads and two half-track erase heads. For use with synchronized RP61's for stereo recording. Tapelifter and pressure pads. Net Each $113.00

PREAMPLIFIERS

Viking Model RP62C Record/Playback Preamp—Provides mike input channel with 62 db gain and high level input for radio, etc. NAB equalized with control for non-standard tape playback and "magic eye" level indicator. Factory adjusted for bias and equalization of Viking heads; not recommended for recording with other half-track heads or new quarter-track heads without special modification. Signal-to-noise ratio 60 db for half-track recording. Provision for synchronizing bias oscillators in two RP62C units for stereo. **Frequency Response:** 30-14,000 cps ±3 db. **Signal-to-Noise Ratio:** 55 db. **Distortion:** Less than 1% at indicated normal recording level. **Power Required:** 110 v. AC, 50-60 cps. **Size:** 12⅛" x 2¼" x 6¾". Shpg. Wt., 7½ lbs. Net Ea. $77.50

Viking Model RP62VU Record/Playback Preamp—Same as RP62C, but with 4½" VU meter recording and output level indicator. Supplied with standard 19" relay rack mounting panel only. Audio output impedance, 600 ohms. Adjustable erase and bias controls. Matches heads on Viking "85" Series and "95" Series transports. Net Each $119.00

Viking Model PB60 Playback Preamp—NAB equalized with control for non-standard tape equalization. Compensation range permits use with either half-track or quarter-track heads. Signal-to-noise ratio 60 db Built-in 115 v. AC, 50-60 cps power supply. **Size:** 6½" x 3" x 2". Weight, 2 lbs. Net Each... $29.50

ENCLOSURES AND SYSTEMS

Viking Model 400 Consolette—Handsome metal base takes all Viking decks. May be used either vertically or horizontally. Combines with one or more matching 401 amplifier cases for complete recorder. Specify neutral, tan or black finish. Shipping Weight, 6½ lbs. Net Each 14.00

Viking Model 401 Amplifier Enclosure—Matching unit for Model 400 Consolette, accommodates single RP62C; may be stacked if desired. Specify neutral, tan or black finish. Shipping Weight, 4¾ lbs. Net Each $7.50

Viking Model 401A Amplifier Enclosure—Same as Model 401, but takes two Model PB60 preamplifiers. Specify finish. Net Each $8.00

Viking Model D303 Rack Mount Kit—For all Viking "75" Series decks. Made of hammerloid finish, 12¼" x 19" relay rack panel and gray mounting flange. Net Each....... $11.00

Viking Model W3SX Furniture Cabinet—Enclosure accommodates either the "85" or the "75" Series decks, with an RP62C or earlier Model record/playback preamp. Designed for table or shelf mounting. Specify walnut or fruitwood. Net Each $37.50

Viking Model W4SX Furniture Cabinet—Accommodates all "85" or "75" Series decks, with two vertically mounted RP62C's or earlier RP61 record/playbacks preamps at sides. Power amplifier or mixer controls may be installed by removal of bottom panel. Vertical panels on RP62C preamps available. Net $39.50

Viking Model D396 Portable Case—Accommodates any Viking "75" deck and one or two PB60's or one RP62C preamp. Predrilled. Net Each $24.50

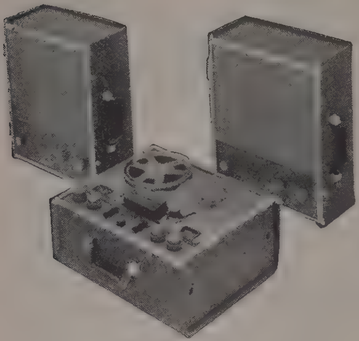
Viking Model D397 Portable Case—Same as D396 but takes "75" deck and two RP62C's or one RP62C and two PB60 preamps. Net Each $34.00

Viking Model FF75 PRO Recorder—Consists of FF75R-LP and RP62C in D396 case. Frequency Response 30-12,000 cps, ±2 db. Net Each $179.50

Viking Model Stereo PRO—FF75ES or FF75SR deck (specify) in portable case with two RP62C preamps. Net Each . $299.00

AMPEX AUDIO Tape Recorders

UNIVERSAL "A" STEREO RECORDERS, SYSTEMS



2560 SYSTEM
(960 Recorder with Two 2010 Transducers)

SERIES 900 STEREO RECORDERS

Precision, fully professional instrument for stereo or monaural recording and playback from all sound sources. Designed for the future, the recorder provides playback of both 2-track and 4-track tapes. **Features:** Calibrated tape position indicator has 0-100 vernier for accuracy. Precision, D'Arsonval type level indicator permits balancing mixed input signals from more than one source; automatically illuminated when instrument is set for record function. Full mechanical, automatic stop when end of reel is reached. Automatic equalization change when speed change is made to assure optimum playback characteristics. Separate record and playback heads permit monitoring while recording. Safety interlock prevents accidental erasures. High speed forward and rewind. Permanently lubricated bearings. Automatic take-up mechanism virtually eliminates hand-threading. Automatic tape tension adjustments eliminate need for tape lifting devices. **Tape Speeds:** 7½"/sec., 3¾"/sec., fast forward and rewind. **Frequency Response:** ±2 db, 50-15,000 cps at 7½"/sec., 55 db dynamic range; ±2 db, 50-10,000 cps at 3¾"/sec., 50 db dynamic range. **Flutter and Wow:** Under 0.2% rms at 7½"/sec.; 0.25% rms at 3¾"/sec. **Record Inputs:** Radio, TV, Phono and Aux. 0.3 v. rms for program level; hi-Z mike inputs. **Outputs:** Approx. 0.5 v. rms from cathode follower. **Controls:** Interlock Record Button; Fast Forward/Rewind; Power/Function Selector; 2 Playback Level Controls (one per channel); 2-Track/4-Track Selector; Push-button Speed Changer; Play/Record Selector; 4 Record Level (two concentric) balance any two input sources; Stop Button. **Drive:** 4-pole motor; capstan with idler and constant-tension tape hold-back. **Reel Size:** Up to 7".

Ampex Models 902 (Gray) or 904 (Beige) Tape Decks—Half-track record, universal playback. Less case. Net Each.......... $\$449^{50}$

Ampex Models 952 (Gray) or 954 (Beige) Tape Decks—Stereo record, universal playback. Less case. Net Each........................$595.00

Ampex Model 910 (Gray) Portable Recorder—Half-track record, universal playback; in portable case. Net Each.......... .... $495.00

Ampex Model 960 (Gray) Portable Recorder—Stereo record, universal playback; in portable case. Net Each...... .... $650.00

MODEL 2010 ELECTRO-ACOUSTIC TRANSDUCER

Consists of a powerful 10-watt amplifier and a specially designed 8" sound projector within acoustically correct enclosure. Balance, Tone and Input Selector controls are provided. Inputs provided for Tape, Phono, Tuner or TV sound. **Amplifier:** Response, ±0.1 db, 30-20,000 cps with less than 0.5 of 1% total harmonic distortion. Noise and hum, 80 db below rated output. **Speaker:** Wide range 8" unit utilizes massive, ribbon voice coil with special Alnico V DG magnet in high efficiency magnetic circuit. Inverse feedback affords improved damping and lower distortion. Frequency response is peak-free over a very wide audio range.

Ampex Model 2010 Transducer—In gray portable case. Net Each .... $\$199^{50}$

SERIES 2500 UNIVERSAL STEREO SYSTEMS

Completely portable systems include two Model 2010 Transducers, and stereo playback recorder in portable gray cases.

Ampex Model 2510 System—With half-track record, universal playback recorder (Model 910). Net Each.. $\$849^{50}$

Ampex Model 2560 System—With stereo record, universal playback recorder (Model 960). Net Each...............$995.00

STEREO CONTROL CENTER-PREAMPLIFIER

Instant selection, preamplification and equalization of any sound source, stereo or monophonic. Each of two channels has independent push-button-controlled inputs for selection of tape, phono, tuners, TV or Aux. Self-contained transformer power supply and DC tube heaters assure low hum and noise, long life. Latest type tone control is constant slope, variable turnover type for distortion-free amplification. **Controls:** Separate Bass and Treble; two Loudness Controls (1 per channel) friction coupled for uniform calibration and balance; Pushbutton Input Selectors (10 total). **Frequency Response:** ±1 db, 20-20,000 cps. **Distortion:** Less than 0.5 of 1%, total. Unmounted, beige.

Ampex Model 402 Control Center—Net Each...... $\$159^{50}$

SERIES 601 STEREOPHONIC RECORDERS

The 601-2P consists of a standard Model 601 tape transport and two modified Model 601 electronic chassis. Bias and erase currents for the erase head and both record heads are supplied by a single oscillator in the master electronics chassis. The oscillator circuitry of the second electronics unit is disabled and bias current supplied to it from the master electronics chassis is fed to the record head associated with the second electronics. **Frequency Response:** ±2 db, 50-10,000 cps at 7½"/sec. **Signal-to-Noise Ratio:** Over 50 db per channel. **Flutter and Wow:** Below 0.17%. **Inter-Track Crosstalk Rejection:** Over 50 db. **Speed:** Single speed. **Playback Timing Accuracy:** ±0.2% (±3.6 seconds in a 30-minute recording). **Inputs:** Two for each track, microphone and line level, mixed internally. Microphone inputs supplied are high impedance, can be converted to low impedance (30-50 or 150-250 ohms) by installation of accessory plug-in transformers (Ampex No. 17331-1), which must be ordered separately. Line inputs are high impedance (0.5 meg.) unbalanced; 0.5 volt required for program level. **Outputs:** One for each track, 600 ohms either balanced or unbalanced, 1.23 volts (0 VU) from tapes recorded at program level. **Case and Size:** Portable, Saddle Tan Samsonite, 8" x 13" x 24½". Unmounted chassis available on special order. **Power Required:** 85 watts, 117 volts AC, 60 cycles, (50-cycle can be supplied if specified). **Controls:** Controls and other similar features are the same as Model 601 Recorder. **Accessories:** Plug-in microphone transformer (two required for each machine) Ampex No. 17331-1. Monitor loudspeaker amplifier in portable case Ampex No. 620-P. Weight, 42 lbs.

Ampex Model 601-2PF—Portable, 7½"/sec. Net.... $\$995^{00}$

Ampex Model 601-2PS—Portable, 3¾"/sec. Net...$1045.00

Ampex Model 601-2UF—Unmounted, 7½"/sec. Net. 950.00

Ampex Model 601-2US—Unmounted, 3¾"/sec. Net. 995.00

Ampex Model 620-P Speaker-Amplifier—In portable case. (Not supplied with 601's). Net Each...... $\$189^{50}$

Ampex Model 17331-1 Plug-in Transformer—Not supplied with 601's. Net Each...................... $\$22^{95}$

SERIES 601 MONOPHONIC TAPE RECORDERS

Models 601-P and 620-P

Speed: Single speed, full or half track. 7" EIA reel max. **Response:** 40-15,000 cps at 7½"/sec., less than 4 db down at 15,000 cps; ±2 db, 40-10,000 cps. **Signal-to-Noise:** Over 55 db at 3% harmonic distortion. **Flutter and Wow:** Below 0.17%. **Playing Data:** Starts and stops in less than 1 second; plays 32 minutes with 7" (1200-ft.) reel; fast forward or rewind 90 seconds for 1200 ft. reel. **Record Inputs:** Microphone—accommodates high or low impedance microphone (low impedance microphone input secured by adding accessory plug-in transformer Model 17331-1—not supplied); Line (unbalanced), 0.5 volt required for program record level. **Playback Output:** 600 ohm, 1.23 volts. Balanced or unbalanced (from tapes recorded at program level). **Amplifiers:** Separate record, playback and line amplifiers. **Heads:** Separate erase, record and playback heads in one housing. **Size:** Overall, including Samsonite carrying case, 8" x 13¾" x 16½".

Ampex Model 601-PF—Portable, 7½"/sec. Net Ea.. $\$595^{00}$

Ampex Model 601-PS—Portable, 3¾"/sec. Net Each.$625.00

Ampex Model 601-UF—Unmounted, 7½"/sec. Net Ea.545.00

Ampex Model 601-US—Unmounted, 3¾"/sec. Net Ea.. 575.00

Ampex Model 17331-1 Plug-in Transformer—Net Ea. 22.95

MODEL 620-P AMPLIFIER-SPEAKER

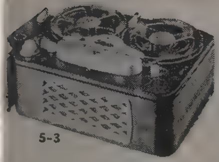
Frequency Response: Overall, 65-10,000 cps, essentially flat, with substantial response above and below; amplifier, 20-20,000 cps ± ½ db. **Power Output:** 10 watts; speaker will handle full output. **Signal-to-Noise:** 70 db below rated output. **Controls and Connections:** Separate level and equalization controls, on-off switch, external speaker jack and indicator light on front panel. Equalization control gives level tilt to speaker output, boosting bass or attenuating treble up to relative 6 db or vice versa. Plugging in external speaker automatically cuts out the 620's speaker and network. Concentric pin audio input connector. AC power cable and convenience outlet included. **Impedance:** Input, 20,000 ohms: Output, 12 ohms to external speaker. **Size:** 13" x 16" x 8" Operates on 55 watts (0.5 amp.), 117 v. AC, 50 or 60 cps (specify cps desired). Weight, 25 lbs.

Ampex Model 620-P Speaker-Amplifier—Net Each. $\$189^{50}$

ape Recorders, Accessories

NDBERG TAPE RECORDERS, SYSTEMS

MODEL 5 STEREO RECORDERS


5-3

Skillfully engineered stereo tape recorder also doubles as an amplification center for any stereo material such as discs and broadcasts. **Features:** Complete facilities for 4-track stereo or monophonic record-playback; plus, playback of 2-track stereo, ½ and ¼ track monophonic tape. Precision Laminar inline head is double mu-metal shielded for low distortion and cross talk. Selective erase head erases tracks ividually. Unique stabilizer circuit replaces conventional VU er for more accurate, efficient record level indicator. Close rance capstan assembly, heavy balanced flywheel of 5″ steel k and uniform speed motor keep tape tension low; fidelity high hout head wear. Safety interlock prevents accidental erasure; omatic tape stop for added safety. Handy, clock-type mechsm locates recorded material. Built-in 5½″ x 8″ Goodmans aker provides excellent reproduction. Fine quality microphone flat response ±3 db to 13,000 cps. **Tape Speeds:** 1⅞″/sec., ″/sec. and 7½″/sec. **Wow and Flutter:** 0.1% at 7½″/sec.; % at 3¾″/sec. **Frequency Response:** 30-20,000 cps at 7½″/ ; 30-16,000 cps at 3¾″/sec. **Signal-to-Noise Ratio:** 60 db below est recording level. **Bias Frequency:** 67 kc common to each nnel. **Inputs:** Mike, 1.5 mv; radio-phono, 75 mv; disc or broad-, 15 mv for each channel. **Playback Outputs:** 0.7 v. cathode ower; 3.5 watt speaker. **Power Required:** 75 watts, 110-125-145--220-245 v. AC, 60 cps.

dberg Model 5—Monophonic recorder, stereo reproducer for eed, 4-track operation. Has two 500-ohm cathode follower puts and 2 external speaker outputs. Complete with mike, it and output cords and 2 reels. In mahogany inet for slide drawer or portable use. Net Each... **$419.50**

dberg Model 5-1—Same as Model 5 but includes a handgage transport case. Net Each.................... **$442.50**

dberg Model 5-2—Stereo-monophonic recorder with tape e, single recording amplifier, two matched stereo playback lifiers in mahogany cabinet. Second record amplifier mounted uxiliary mini-cabinet (as illustrated). With two mikes, inputout cords, supply and take-up reels and transport gage case. Net Each.......................... **$514.50**

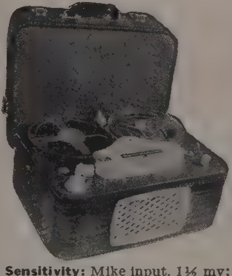
dberg Model 5-3—Same as Model 5-2, less luggage case. Each.. **$493.50**

dberg Model 5-2-266—Model 5-2 plus two bookshelf speaker ems. Net Each **$638.50**

dberg Model 266 Speaker System—Matched system for stereo lifiers has speaker in mahogany finished cabinet. Finished on des for vertical or horizontal use. Use two for a complete eo system. Net Each.................................. **$79.50**

DELS 2 AND 4 PORTABLE TAPE RECORDERS

MODEL 2



ers two tape speeds, 1⅞″/ and 3¾″/sec., with autoic equalization. **Frequency ponse:** 3¾″/sec., 30-10,000 ±2 db; 1⅞″/sec., 30-0 cps, ±2 db. **Wow and tter:** Below 0.2% at 3¾″/ ; below 0.25% at 1⅞″/sec. **nal To Noise Ratio:** −52 at 3¾″/sec.; −54 db at ″/sec. **Erase and Bias:** kc. **Playback Amplifier:** l kc; 2-watts, (2.8 v.), distion below 1%; 3.3-watts v.), distortion below 5%; 50 cps; 1-watt (2 v.), distion below 1%; 1½-watts v.), distortion below 5%. tortion at maximum reding level is below 1%. **uts:** Mike (5 meg), radio/ no (0.5 meg); both can be d simultaneously for mixing. **Sensitivity:** Mike input, 1½ mv; io/phono input, 75 mv. **Heads:** Record Playback has .00025″ , Mu-metal shielded; accommodates dual track; erase head. lt-in revolution counter dial. Magic Eye recording level indior. **Tubes:** 1 each EF804, ECC83, EL84, EM71; two selenium ifiers; hermetically sealed, full-wave bridge rectifier. Operates 55 watts, 115 v. AC, 60 cps. Comes in fine-grain mahogany inet, 15″ long, 11⅝″ wide, 6⅝″ high. Weight, with case, 27 lbs.

dberg Model 2—Complete with case and crystal mike (rense of 20-13,000 cps, ±3 db), input and output cords, take-up and tape, and instruction manual. Each.. **$249.50**

dberg Model 2F—Same as Model 2 but with built-in solids and separate foot pedal control for remote ration. Net Each.............................. **$299.50**

MODEL 4

ntical to the Model 2 in design and most essential specifications. s automatic tape stop and is convertible to stereo. **Three eeds:** 1⅞″/sec., 3¾″/sec. and 7½″/sec. **Frequency Response:** ″/sec., 30-18,000 cps, ±2 db. **Wow and Flutter:** Below 0.1% at ″/sec. **Signal To Noise Ratio:** −55 db at 7½″/sec. **Erase and s:** −67 kc. **Additional Stereo-Monophonic Switch:** Three itions, Stereo play, Track 1 or 4 Record-Play, Track 3 or 2 ord-Play. **Power Required:** 60 watts, 115-125-145-200-220-245 AC, 60 cps. **Size:** 11⅝″ w. x 15″ l. x 6⅝″ h. Weight, 27 lbs.

dberg Model 4—Complete with same accessories Model 2. Net Each.............................. **$349.50**

dberg Model 4F—Same as Model 4 but with built-in solenoids separate foot pedal for remote operation. Each.. **$399.50**

BELL STEREO TAPE DECKS, PREAMPS

NEW STEREO TAPE TRANSPORTS

Designed to provide you with unlimited flexibility in the planning of your tape playing system. Available in a variety of head arrangements to suit every need. Separate models available for ½-track or ¼-track recording. **Features:** Piano-key touch controls for all functions, electro-mechanical for positive control; Clear-Vu index counter; three heavy-duty 4-pole motors (without belts, pulleys, clutches or mechanical brakes) for perfect transient tape control; less than 0.2% flutter at 7½″/sec.; electrodynamic positive braking without strain, stretch or breakage. **Frequency Response:** ±2 db, 25-12,000 cps overall record-playback; extends to 15,000 cps playback only. **Signal-to-Noise:** Better than 50 db at peak record signal (reaching 3% harmonic distortion). **Flutter:** Under 2% at 7½″/sec. **Tape Speeds:** 3¾″/sec. and 7½″/sec.; fast forward and rewind, 30′/sec. **Reel Size:** 7″ max. **Head Mountings:** Adjustable for azimuth and tracking. **Power Required:** 50 watts, 117 v., 60 cps. **Size:** 15⁵⁄₁₆″ w. x 13½″ l. x 4¾″ deep below mounting surface, 2¼″ above. Shipping Weight, 23 lbs.

Bell Model T-210—Monophonic erase, record and playback transport. Net Each........Zone 1: **$114.95** Zone 2: **$118.95**

Bell Model T-211—Monophonic and ½-track stereo playback transport. Net Each...Zone 1: **$124.95** Zone 2: **$128.95**

Bell Model T-212—Monophonic erase, record and playback, ½-track stereo playback transport. Net Each. Zone 1: **$134.95** Zone 2: **138.95**

Bell Model T-213—Monophonic and ½-track stereo erase, record and playback transport. Net Each..........Zone 1: **$154.95** Zone 2: **158.95**

Bell Model T-221—¼-track and ½-track stereo playback transport. Net Each........Zone 1: **$144.95** Zone 2: **$149.95**

Bell Model T-223—½-track stereo erase, record and playback, ¼-track stereo playback transport. Net Each. Zone 1: **$169.95** Zone 2: **174.95**

MODEL RP-120B RECORD-PLAYBACK PREAMP

Combines playback characteristics of Model P-100 preamplifier, plus bias oscillator and equalizer circuits for recording. Supersonic bias-erase oscillator provides NAB standard recording characteristics at 7.5″/sec. Cathode indicator for exact leveling. Red pilot light for recording; blue for playback. Single control operation. **Sensitivity:** .001 v. for full recording level at mike, 0.1 volt at high level input. **Noise Level:** .002 volt, min. gain; .005 volt, max. gain. **Inputs:** Crystal or Hi-Z mike; high level for tuner, etc. **Output:** 10,000 ohm impedance, cathode follower. **Frequency Response:** Playback-standard NAB ±1 db, 20-15,000 cps; record-playback ±2 db, 25-12,000 cps. **Tubes:** 1-ECC82, 2-ECC83, 1-EZ80, 1-DM70 and selenium rectifier. **Distortion:** 0.1% for maximum recording level. **Power Required:** 60 watts, 117 v., 60 cps AC. **Size:** 2¾″ w. x 12½″ l. x 5½″ below mounting surface. Shipping Weight, 10 lbs.

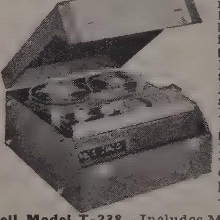
Bell Model RP-120B Record-Playback Preamplifier—Net Each................Zone 1: **$59.95** Zone 2: **$62.00**

MODEL P-100 TAPE PREAMPLIFIER

Playback unit for transports; delivers flat response to your power amplifier. Meets professional standards of compensation, hum and noise. Single output connects to auxiliary input of your amplifier; convenience receptacle on transport supplies power. **Noise:** .0005 volt at min. volume; .002 v. at max. volume. **Distortion:** Less than 0.1% at 1 kc at 1 v. output. **Frequency Response:** Standard NAB ±1%, 20-15,000 cps. **Output:** Cathode follower, 10,000 ohms impedance. **Max. Input:** 20 db greater than normally supplied without distortion. **Gain:** 50 db at 1 kc. **Tubes:** 1-ECC83, 1-ECC82, 1-EZ80, plus selenium rectifier. **Power Required:** 15 watts, 117 v., 60 cps AC. **Size:** 2¾″ w. x 12½″ l. x 5½″ below mounting surface. Shipping Weight, 6 lbs.

Bell Model P-100 Tape Preamplifier—With dial plate, hardware. Net Each................Zone 1: **$39.95** Zone 2: **$41.50**

PORTABLE TAPE SYSTEMS



Professional quality, stereo record-playback systems with built-in preamplifiers, completely assembled in portable carrying case.

Bell Model T-218—Includes one Model T-213 Tape Transport, two Model RP-120B Record-Playback Preamplifiers in portable carrying case. Net Each..Zone 1: **$314.95** Zone 2: **319.95**

Bell Model T-228—Includes one Model T-223 Tape Transport with two Model RP-120B Record-Playback Preamplifiers in portable carrying case. Net Each..Zone 1: **$329.95** Zone 2: **339.95**

Bell Model T-238—Includes Monophonic and ¼-Track Stereo Erase/Record-Playback; ½-Track Stereo Playback with two Model RP-220 Record-Playback Preamplifiers in portable carrying case.
Net Each ....Zone 1: **$339.95** Zone 2: **$349.95**

Tape and Wire Recorders

MOHAWK POCKET RECORDERS

MIDGETAPE MODEL "300"

All-transistorized design operates on only 1 battery; requires no electricity. Records and plays back instantly, wherever you go; on train, plane, car, in office, hotel or home. Long range Sonic Mike records from 30 ft. or more away from unit. Three simple controls for easy operation. Automatic, cartridge-loaded hi-fi erasable, mailable tape plays 1 or 1½ hours. **Tape Speed:** 1⅞″/sec.; manual rewind. **Frequency Response:** 150-5,000 cps. **Wow and Flutter:** Less than 0.7%. **Signal-to-Noise Ratio:** 42 db. **Gain:** 78 db. **Record Level:** Indicated by colored marks on volume control. **Input:** 2000 ohms, one mv minimum; uses any mike up to 2000 ohms or less, except carbon types. **Output:** 10 mw, 2000 ohms. **Controls:** On-Off; Play-Record; Volume. **Motor Speed Control:** Electro-mechanical governor. **Battery Life Indicator:** Incandescent lamp. **Transistors:** 4. **Size:** 8½″ l. x 3⅞″ w. x 1⅞″ h. Weight, 3 lbs.

Mohawk Midgetape "300" —With battery, combination microphone and speaker, and 1-hour tape. Net.. **$249.50**

MIDGETAPE MODEL "400"

Similar to Model "300" but has additional "Auto-Dictation" volume control which sets proper recording unit. Plays back through microphone, optional earphones or internal loudspeaker. Push-button mike starts or stops recording or playback. Handsome two-tone charcoal and gray enamel finish.

Mohawk Midgetape "400"—With push-button mike and playback speaker combination, battery and 1-hour tape. Net Each **$269.50**

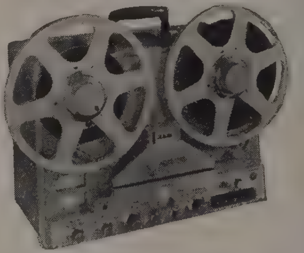
MIDGETAPE MODEL "PROFESSIONAL 500"

Miniature, battery-operated, transistorized, high fidelity tape recorder requiring no external power source. Six transistors provide powerful, dependable operation on one battery. Battery life is 12-50 hours, depending on usage. Optional, battery-operated, transistorized amplifier-speaker may be used for group playback. Unit records instantly and plays right back. VU meter for control of distortion and maintenance of high fidelity levels. Uses cartridge-loaded, ¼″ Mylar base tape that will record for 45 minutes. **Frequency Response:** 50-10,000 cps. **Wow and Flutter:** 0.3%. **Signal-to-Noise Ratio:** 48 db. **Tape Speed:** 3¾″/sec. **Record Level:** 2%. **Erase:** 20 kc, AC. **Input:** (1) 2,000 ohms or less, 0.2-3 mv. **Outputs:** (2) 10 mw at 2,000 ohms. Two zero VU at 600 ohms. **Controls:** Play/Record; Volume; On-Off. **Transistors:** 6. **Size:** 8½″ x 3⅞″ x 1⅛″. Weight, 3 lbs.

Mohawk Midgetape "Professional 500"—Complete with dynamic mike, one double and single earphone kit, one input connector and control cable, one output connector, one battery and a 45-minute cartridge tape. Net Each **$359.50**

MAGNECORD STEREO RECORDER

MODEL 728 PORTABLE RECORDER



Professional design takes up to 10-inch reels on compact, versatile transport with separate playback and record amplifiers. **Features:** Electrical pay-off and take-up torques. Direct drive, hysteresis synchronous motor for 2-speed operation. Straight slot loading and rearrangeable 4-head construction for extra convenience. Two VU meters (one per channel) for accurate leveling. Handy, monitor phone jack. Individual channel gain controls plus master gain controls. Easy push button function selection. Tape position indicator and other features permit sound-on-sound recording. Fail-safe brakes.

SPECIFICATIONS

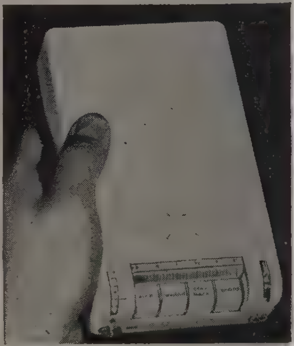
Tape Speeds: 7½″/sec. and 15″/sec.; or 3¾″/sec. and 7½″/sec. available; 2,400 ft. in 55 seconds for fast forward and rewind. **Heads:** Full-track, half-track or split stereo erase (specify); Record; reproduce head; full-track, half-track or inline stereo. **Frequency Response:** ±2 db, 30-18,000 cps at 15″/sec.; 40-15,000 cps at 7½″/sec.; 50-10,000 cps at 3¾″/sec. **Timing Accuracy:** ±3 seconds in 30 minutes. **Signal-to-Noise Ratio:** Better than 55 db per channel. **Cross-Talk:** Better than 55 db per channel. **Flutter and Wow:** 0.1% at 15″/sec.; 0.15% at 7½″/sec. **Inputs:** One hi-Z, one low-Z with plug-in transformer and one unbalanced bridge per channel. **Controls:** On-Off Switch; Function Push Buttons (Rewind, Record, Stop, Play, Fast Forward); Speed Control (Slow, Fast); Operate-Load-Cue Switch; Channel 1 Gain; Channel 2 Gain; Master Record Gain; Master Playback Gain; Calibrate Switch; Level Adjust. **Output:** Cathode follower; 2 v. zero level ±4 dbm with 600-ohm plug-in output transformer. **Size:** 17⅝″ x 12⅞″ x 12″ overall. Weight, 50 lbs., approx.

Model 728-4X—Stereo-stereo version, less case...... **$759.00**

Model 728-4—Same, with case.................... **$809.00**

Additional Pricing Information on Other Head Configurations Available Upon Request.

THE MINIFON P55S POCKET-SIZE PUSHBUTTON WIRE RECORDER



Using the world's smallest electric motor, the P55S and P55L though small enough to be concealed in a man's pocket, will make speech recordings for a maximum of 4 hours—all on a single reel of wire light enough to be placed in an envelope and mailed with just a four-cent stamp. Minifon wire recordings can be erased and used over and over again. The wire is thinner than a woman's hair. With its standard crystal mike, recordings can be made of sound as far away from the mike as 25 feet. Push-button control provides instantaneous action for recording, stopping, rewinding, playing back, erasing by re-recording and rewinding. With its dictation footage clock, the Minifon is also ideally suited for dictation purposes. Recordings can be played back through stetoset, earphones, speaker-microphone, through any radio, TV set or external amplifier.

SPECIFICATIONS

Overall Size: 3 15/16″ x 5 11/16″ x 1½″. **Weight:** Approx. 1.7 lbs. **Wire Velocity:** Slow, 13.4″/second. **Wire Diameter:** 0.002″. **Frequency Response:** 200 to 5000 cps. **Rewind Speed:** 4½ times fwd. speed. **Input Impedance:** 2 megohm-High Impedance. **Output Voltage:** 4 to 5 volts across 40,000 ohms, undistorted. **Overall Gain:** 70 db. **Wow and Flutter:** 0.7 down to 0.5. **Amplifier:** 3-stage subminiature type. **Bias:** DC. **Erase Gap Current:** DC. **Signal-To-Noise Ratio:** 25 db. **Motor:** Precision miniature motor with electrical governor. **Motor Battery:** 10.5 volt dry cell, not rechargeable, approx. life 10 to 15 hours. Motor filament battery life indicator, meter. **Car Battery:** 6 to 12 volts. **Filament Battery:** 1.4 volt leakproof, approx. life, 20 to 30 hours. **B Battery:** 30 volt standard, approx. life, 150 to 200 hours. **AC Inverter:** 110/220 volts AC down to 9 volts, DC. **Controls:** Keyboard—stop, rewind, playback and record. **Recording Level Indicator:** Mark on volume control. **Socket:** One for recording and playback.

Minifon Model P55S Recorder —Complete with 60-minute recording wire, crystal microphone and batteries. Net Each **$249.50**

Minifon Model P55L Recorder —Same as Model P55S except: Frequency response, 150-3300 cps; speed, 7.87″/sec.; 120-minute type wire cartridge. Net Each...... **$269.50**

ACCESSORIES

Minifon No.	Description	Net Each
5601	Leather case with sling strap	$17.50
5602	Attache case (foam rubber lined) with built-in microphone	42.00
5603	Leather compartment carrying case	37.50
5604	Transistorized miniature table speaker (for use with battery or AC)	49.50
5605	Wrist watch microphone	37.50
5606	Throat microphone	25.00
5607	Dynamic microphone	42.50
5608	Standard motor battery	3.00
5609	Filament, 1.5 v , leak-proof battery	.20
5610	Anode, 30 v., battery	1.75
5611	Telephone pickup	10.00
5612	Accumulator rechargeable battery (silver cadmium, rechargeable with No. 5613)	79.50
5613	AC power supply 110/220 v.	15.00
5614	Automobile connecting cord (universal)	5.00
5615	Cord for making direct recordings from radio, TV, tape recorders, etc.	5.00

Minifon No.	Description	Net Each
5616	Connecting cord for playback through radio, TV and tape recorders	$ 5.00
5620	Foot switch	6.35
5625	Nylon shoulder holster	7.00
5629	AC conference amplifier	35.00
5630	Noise reducing microphone (dynamic)	37.50
5631	Dynamic tie-clip microphone	25.00
5631T	Tie-clip microphone (magnetic) tropicalized	49.50
5632	Stetoset secretarial earphones	12.50

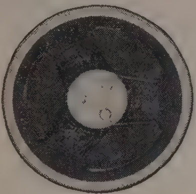
RECORDING WIRE

Supplied complete with take-up spool and plexi-case. **Note:** Wire listed below is interchangeable with P55L and P55S. Difference in recording time is due to operating speeds of units.

Minifon No.	Recording and Playback Time		Net Each
	Model P55L	Model P55S	
5908	90 minutes	60 minutes	$16.50
5909	120 minutes	80 minutes	19.50
5911	180 minutes	120 minutes	26.00
5913	240 minutes	....	34.50

Scotch Brand Recording Tape

MINNESOTA MINING "SCOTCH" BRAND RECORDING TAPE



NO. 131 LOW PRINT® TAPE

pecially designed to reduce "print-through"; provides full 8 db wer print level than conventional tapes. Features high potency ide coating for greater high frequency output. Plastic backing.

Scotch No.	Length of Tape and Reel Type	List Price	Net Each 1-11	Net Each 12 up
1-12	1200′ 7″ plastic reel	$ 4.40	$ 2.93	$ 2.64
1-24H	2400′ NAB 10½″ hub	10.00	6.67	6.00
1-24R*	2400′ NAB 10½″ metal reel	12.40	8.27	7.44
1-48H	4800′ NAB 14″ hub	20.00	13.33	12.00
1-48R	4800′ NAB 14″ reel	26.00	17.33	15.60

NO. 138 LOW PRINT® POLYESTER TAPE

ame as No. 131, except with polyester backing.

8-12	1200′ plastic 7″ reel	$ 7.70	$ 5.13	$ 4.62
8-24H	2400′ NAB 10½″ hub	14.00	9.33	8.40
8-24R*	2400′ NAB 10½″ metal reel	16.40	10.93	9.84
8-48H	4800′ NAB 14″ hub	28.00	18.67	16.80
8-48R	4800′ NAB 14″ reel	34.00	22.67	20.40

NO. 200 "DOUBLE-LENGTH" POLYESTER TAPE

ays twice as long as standard tape.

Scotch No.	Length of Tape and Reel Type	List Price	Net Each 1-11	Net Each 12 up
0-3	300′ plastic 3″ reel	$ 1.60	$ 1.07	$ 0.96
0-12	1200′ plastic 5″ reel	5.45	3.63	3.27
0-24	2400′ plastic 7″ reel	9.50	6.33	5.70
0-48RPS	4800′ EIA 10½″ reel with 5/16″ center hole	22.00	14.67	13.20

NO. 111 CELLULOSE ACETATE TAPE

ough general purpose magnetic tape, ¼″ wide, .0015″ thick cking; reddish brown in color. Coatings are oriented for optimum rformance in the longitudinal direction (unoriented coatings ailable on special order). **Properties:** 0 db relative low-frequency nsitivity; 0 db relative low frequency output (for 1% third order stortion); 0 db relative high-frequency sensitivity; 1000 Oersteds asing field (for 60 db signal reduction).

Scotch No.	Length of Tape and Reel Type	List Price	Net Each 1-11	Net Each 12 up
1-1.5	150′, 3″ plastic reel	$ 0.70	$ 0.47	$ 0.42
1-3	300′, 4″ plastic reel	1.35	.90	.81
1-6	600′, 5″ plastic reel	2.25	1.50	1.35
1-12	1200′, 7″ plastic reel	3.50	2.34	2.10
1-24H†	2400′, NAB hub	8.50	5.67	5.10
1-24R†*	2400′, NAB 10½″ metal reel	10.90	7.27	6.54
1-48H†	4800′, NAB hub	17.00	11.33	10.20
1-48R†	4800′, NAB 14″ reel	22.10	14.73	13.26

NO. 102 POLYESTER (MYLAR) TAPE

ormerly No. 111AM. Similar to No. 111 except on extra-strong ylar base.

2-6	600′ plastic 5″ reel	$ 4.10	$ 2.73	$ 2.46
2-12	1200′ plastic 7″ reel	6.65	4.43	3.99
2-24H	2400′ NAB hub	12.10	8.07	7.26
2-24R*	2400′ NAB 10½″ metal reel	14.50	9.67	8.70
2-48H	4800′ NAB hub	24.20	16.13	14.52
2-48R	4800′ NAB 14″ reel	30.20	20.13	18.12

NO. 190 CELLULOSE ACETATE TAPE

imilar to No. 150, except on cellulose acetate base.

Scotch No.	Length of Tape and Reel Type	List Price	Net Each 1-11	Net Each 12 up
0-9	900′, 5″ plastic reel	$ 3.50	$ 2.34	$ 2.10
0-18	1800′, 7″ plastic reel	5.50	3.67	3.30
0-36H	3600′, NAB hub	10.00	6.67	6.00
0-36R*	3600′, NAB 10½″ metal reel	12.85	8.57	7.71
0-72H	7200′, NAB hub	20.00	13.33	12.00
0-72R	7200′, NAB 14″ reel	26.00	17.33	15.60

Also available on 10½″ plastic reel with NAB center hole (3″) PL and 10½″ plastic reel with EIA center hole (5/16″) RPS at the me prices as the standard NAB reel listed.

Output variation within the reel at 10,000 cps is less than ± ¼ db d is less than ± ½ db from reel to reel. The entire length is spliceee, except 4800′ length, which contains a maximum of one splice.

NEW NO. 8000 QUICK-LOAD CARTRIDGE

Fits new cartridge machines for both monophonic and stereo sound. Eliminates threading, rewinding, spare reels. Ideal for easy home storage. Cartridge loaded with No. 150 polyester tape.

Scotch No.	Tape Length and Reel	List Price	Net Each 1-3	Net Each 4-11
8000	560′ cartridge	$4.50	$4.05	$3.83

NO. 120 CELLULOSE ACETATE TAPE

"High Output" coating (dark green in color) for high fidelity recordings. Permits greater dynamic range and freedom from distortion. Backing ¼″ wide, 0.0015″ thick. **Properties:** 5.0 ma bias current required. Relative low-frequency sensitivity, +3½ db; relative low-frequency output, +7½ db; relative high-frequency sensitivity, 0 db. 900 Oersteds erasing field (for 60 db signal reduction). Oriented in longitudinal direction.

Scotch No.	Length of Tape and Reel Type	List Price	Net Each 1-11	Net Each 12 up
120-3	300′, 4″ plastic reel	$ 1.75	$ 1.17	$ 1.05
120-6	600′, 5″ plastic reel	3.50	2.34	2.10
120-12	1200′, 7″ plastic reel	5.50	3.67	3.30
120-24H	2400′, NAB hub	10.00	6.67	6.00
120-24R*	2400′, NAB 10½″ metal reel	12.85	8.57	7.71
120-48H	4800′, NAB hub	20.00	13.33	12.00
120-48R	4800′, NAB 14″ reel	26.00	17.33	15.60

NO. 122 HIGH OUTPUT POLYESTER TAPE

Formerly No. 120AM. Similar to No. 120. Super-sensitive oxide coated on high impact strength polyester (.0015″ thick, ¼″ wide).

Scotch No.	Length of Tape and Reel Type	List Price	Net Each 1-11	Net Each 12 up
122-6	600′ plastic 5″ reel	$ 4.60	$ 3.07	$ 2.76
122-12	1200′ plastic 7″ reel	7.65	5.10	4.59
122-24H	2400′ NAB hub	14.10	9.40	8.46
122-24R*	2400′ NAB 10½″ metal reel	16.50	11.00	9.90
122-48H	4800′ NAB hub	28.20	18.80	16.92
122-48R	4800′ NAB 14″ reel	34.20	22.80	20.52

NO. 150 POLYESTER (MYLAR) TAPE

"Extra-Play" oxide coating on "Weather-Balanced", super-strong polyester backing (¼″ wide, .001″ thick); dark red color. 50% more recording time; best high frequency output and pulse resolution. **Properties:** 4.25 ma bias current required. Relative low-frequency sensitivity: 0 to 1½ db; relative low-frequency output, 0 to +1 db; relative high-frequency sensitivity, +2 to +3½ db. 800 Oersteds erasing field (for 60 db signal reduction). Longitudinal orientation.

150-2.25	225′ plastic 3″ reel	$ 1.00	$ 0.67	$ 0.60
150-9	900′ plastic 5″ reel	3.60	2.40	2.16
150-18	1800′ plastic 7″ reel	6.20	4.13	3.72
150-36H	3600′ NAB hub	12.00	8.00	7.20
150-36R*	3600′ NAB 10½″ metal reel	14.40	9.60	8.64
150-72H	7200′ NAB hub	24.00	16.00	14.40
150-72R	7200′ NAB 14″ reel	30.00	20.00	18.00

*Also available on 10½″ plastic reel with NAB center hole (3″) RPL and 10½″ plastic reel with EIA center hole (5/16″) RPS at the same prices as the standard NAB reel listed.

NO. 41 SPLICING TAPE

Scotch No.	Size	List Price	Net 1 to 11	Net 12 or More
41-½ S‡	½″ x 150″	$0.39	$0.39	$0.28
41-½ L	½″ x 66′	.76	.76	.53
41-¾ L	¾″ x 66′	1.01	1.01	.71
41-7/32 L	7/32″ x 66′	.57	.57	.40

‡Supplied on metal utility dispenser.

NO. 43 PLASTIC LEADER AND TIMING TAPE

Scotch No.	Size	List Price	Net per Roll, in Lots of 1-11 Rolls	Net per Roll, in Lots of 12 or More
43-1.5	¼″ x 150′	$0.90	$0.60	$0.54

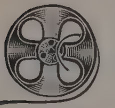
EMPTY REELS AND BOXES, MAILING BOXES

Scotch No.	Description	List Price	Net Ea., in Lots 1-11 Reels or Boxes	Net Ea., in Lots 12 or More
RB-3	3″ (150′) Plastic reel & box	$0.25	$0.17	$0.15
RB-4	4″ (300′) Plastic reel & box	.55	.37	.33
RB-5	5″ (600′) Plastic reel & box	.65	.44	.39
RB-7	7″ (1200′) Plastic reel & box	.75	.50	.45
RB-10½ M	10½″ (2400′) NAB metal reel with box	4.50	3.00	2.70
RB-10½ RPS	10½″ (2400′) EIA or NAB plastic reel with box	4.50	3.00	2.70
RB-10½ RPL		4.50	3.00	2.70
RB-14M	14″ (4800′) NAB metal reel with box	8.70	5.80	5.22
H-M	NAB metal hub	.75	.50	.45
B-3	3″ empty box	.15	.10	.09
B-4, B-5, B-7	4″, 5″, 7″, empty box	.20	.14	.12
B-10½	10½″ (2400′) empty box	.75	.50	.45
B-14	14″ (4800′) empty box	1.00	.67	.60
MB-4,	4″ (300′) mailing boxes	.15	....	.09
MB-5†	5″ (600′) mailing boxes	.15	....	.09
MB-7†	7″ (1200′) mailing boxes	.20	....	.12
MB-10½†	10½″ (2400′) mailing boxes	.30	....	.18

†Available only in multiples of 48; all others in multiples of 12.

Recording Tape, Accessories

AUDIOTAPE® AND ACCESSORIES



Supplied in 5″ and 7″ on "C-Slot" plastic reels for standard recorders. Unique threading design eliminates kinks and twists, makes threading easier; self-locking. Tape standard with oxide wound in; for oxide wound out, change last digit of Audiotape No. to a cipher (0); ex.: 151 becomes 150. All reels individually boxed. **Five-spoke reels on request.**

NEW "TEMPERED" MYLAR TAPE

Double strength, super-thin ½-mil. mylar that has been tempered for extra long life. Available in 10½″ reel (4800 ft.) size for longer, uninterrupted recording time (at 7½″/sec.).

Audio-tape No.	Description		Std. Qty.	List Price	Net Each	
	Lgth.	Wound On			Less than Std. Qty.	Std. Qty.
1231T	1200′	5″ Plastic	10	$ 4.75	$ 3.17	$ 2.85
2431T	2400′	7″ Plastic	10	8.75	5.83	5.25
4831T-R	4800′	10½″ Al. Reel	5	20.50	13.67	12.30
4831T-FS	4800′	10½″†	5	20.50	13.67	12.30

MASTER "LOWPRINT-THROUGH" TAPE

"Print-through", the transfer of magnetization from one layer of tape to an adjacent layer, causes irritating background noises. This new tape virtually eliminates it, cutting "print-through" by 8 db without changing performance characteristics. Completely interchangeable with ordinary tape.

PLASTIC BASE MASTER AUDIOTAPE

Audio-tape No.	Description		Std. Qty.	List Price	Net Each	
	Lgth.	Wound On			Less than Std. Qty.	Std. Qty.
651-M	600′	5″ Plastic	10	$ 2.75	$ 1.83	$ 1.65
1251-M	1200′	7″ Plastic	10	4.30	2.86	2.58
2551H-M	2500′	NAB Hub	5	9.80	6.53	5.88
2551R-M	2500′	10½″ Al. Reel	5	12.50	8.33	7.50
2551FS-M	2500′	10½″†	5	12.50	8.33	7.50
5051H-M	5000′	NAB Hub	5	19.55	13.03	11.73
5051R-M	5000′	14″ Al. Reel	5	26.00	17.33	15.60

1 ½-MIL "MYLAR" MASTER AUDIOTAPE

671-M	600′	5″ Plastic	10	$ 4.60	$ 3.06	$ 2.76
1271-M	1200′	7″ Plastic	10	7.70	5.13	4.62
2571H-M	2500′	NAB Hub	5	14.00	9.33	8.40
2571R-M	2500′	10½″ Al. Reel	5	16.40	10.93	9.84
2571FS-M	2500′	10½″†	5	16.40	10.93	9.84

PLASTIC BASE AUDIOTAPE

Maximum fidelity, uniformity, frequency response and freedom from noise and distortion. Base is 1½ mil acetate.

Audio-tape No.	Description**		Std. Qty.	List Price	Net Each	
	Lgth.	Wound on			Less than Std. Qty.	Std. Qty.
151	150′	3″ Plastic	10	$ 0.70	$ 0.47	$ 0.42
351	300′	4″ Plastic	10	1.35	.90	.81
651	600′	5″ Plastic	10	2.25	1.50	1.35
1251	1200′	7″ Plastic	10	3.50	2.34	2.10
2551H	2500′	NAB Hub	5	8.50	5.67	5.10
2551R	2500′	10½″ Al. Reel	5	10.90	7.27	6.54
2551FS	2500′	10½″†	5	10.90	7.27	6.54
5051H	5000′	NAB Hub	5	17.00	11.33	10.20
5051R	5000′	14″ Al. Reel	5	22.10	14.73	13.26

SUPER-THIN AUDIOTAPE

Made on ½-mil "Mylar", gives twice as much recording time per reel. For extended play where tape tension is not excessive.

1231	1200′	5″ Plastic	10	$3.50	$2.34	$2.10
2431	2400′	7″ Plastic	10	6.50	4.33	3.90

AUDIOTAPE ON 1½-MIL "MYLAR"

High-strength, super-durable. Withstands extreme temperatures, is virtually immune to humidity, gives maximum tape life.

671	600′	5″ Plastic	10	$ 4.10	$ 2.73	$ 2.46
1271	1200′	7″ Plastic	10	6.65	4.43	3.99
2571H	2500′	NAB Hub	5	12.10	8.07	7.26
2571R	2500′	10½″ Al. Reel	5	14.50	9.67	8.70
2571FS	2500′	10½″†	5	14.50	9.67	8.70
5071H	5000′	NAB Hub	5	24.20	16.13	14.52
5071R	5000′	14″ Al. Reel	5	30.20	20.13	18.12

PLASTIC-BASE "LR" AUDIOTAPE

50% more recording time per reel on low-cost 1-mil cellulose acetate base, affording maximum economy.

941	900′	5″ Plastic	10	$ 3.50	$ 2.34	$ 2.10
1841	1800′	7″ Plastic	10	5.50	3.67	3.30
3641H	3600′	NAB Hub	5	10.00	6.67	6.00
3641R	3600′	10½″ Al. Reel	5	12.85	8.57	7.71
3641FS	3600′	10½″†	5	12.85	8.57	7.71
7241H	7200′	NAB Hub	5	20.00	13.33	12.00
7241R	7200′	14″ Al. Reel	5	26.00	17.33	15.60

†10½″ Fiberglas reel (EIA) with solid hub and 5/16″ center hole.
*3″ plastic reel in self-mail package.

COLORED AUDIOTAPE

Same professional quality tape as Plastic Base Audiotape listed above but on **blue** or **green** plastic base. To order, add **G** to Type No. for green, **B** for blue. **Price is same.**
****Colored Reels.** 5″ and 7″ plastic reels at no extra charge, designate Red, Green, Yellow or Blue by adding "RR", "GR", "YR" or "BR", respectively.

"LR" (LONGER RECORDING) AUDIOTAPE

On 1-mil Mylar polyester film, provides 50% more recording time per reel. Exceptional strength, durability and storage life.

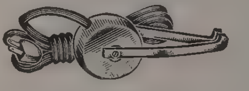
Audio-tape No.	Description		Std. Qty.	List Price	Net Each	
	Lgth.	Wound on			Less than Std. Qty.	Std. Qty.
261	225′	3″ Plastic*	10	$ 1.00	$ 0.67	$ 0.60
961	900′	5″ Plastic	10	3.60	2.40	2.16
1861	1800′	7″ Plastic	10	6.20	4.13	3.72
3661H	3600′	NAB Hub	5	12.00	8.00	7.20
3661R	3600′	10½″ Al. Reel	5	14.40	9.60	8.64
3661FS	3600′	10½″†	5	14.40	9.60	8.64
7261H	7200′	NAB Hub	5	24.00	16.00	14.40
7261R	7200′	14″ Al. Reel	5	30.00	20.00	18.00

†10½″ Fiberglas reel (EIA) with solid hub and 5/16″ center hole.
*3″ plastic reel in self-mail package.

REELS, BOXES, LEADER TAPE

Audio No.	Description	Std. Qty.	List Price	Net Each	Net Ea. Std.Qy.
3PB	3″ plastic reel in box	10	$0.25	$0.17	$0.15
4PB	4″ plastic reel in box	10	.45	.30	.27
5PB	5″ plastic reel in box	10	.60	.40	.36
7PB	7″ plastic reel in box	10	.75	.50	.45
10RB	10½″ aluminum reel in box	5	4.00	2.67	2.40
10FS	10½″ fiberglas EIA, box	5	4.00	2.67	2.40
14RB	14″ aluminum reel in box	5	7.40	4.93	4.44
10H	NAB metal hub	5	.70	.47	.42
5PBR	Red } 5″ plastic reel in box	10	.60	.40	.36
5PBY	Yellow	10	.60	.40	.36
5PBG	Green	10	.60	.40	.36
5PBB	Blue	10	.60	.40	.36
7PBR	Red } 7″ plastic reel in box	10	.75	.50	.45
7PBY	Yellow	10	.75	.50	.45
7PBG	Green	10	.75	.50	.45
7PBB	Blue	10	.75	.50	.45
3B	Empty box for 3″ reel	10	.15	.10	.09
4B	Empty box for 4″ reel	10	.20	.13	.12
5B	Empty box for 5″ reel	10	.20	.13	.12
7B	Empty box for 7″ reel	10	.20	.13	.12
10B	Empty box for 10½″ reel	5	.75	.50	.45
14B	Empty box for 14″ reel	5	1.00	.67	.60
5M	Corrugated mailing box, 5″	10	.15	.10	.09
7M	Corrugated mailing box, 7″	10	.20	.13	.12
10M	Corrugated mailing box, 10½″	10	.30	.20	.18
1HC	Recording head cleaner, 1 oz.	5	.65	.43	.39
3L	Self-timing leader tape, 100′	10	.55	.37	.33
30AL	30, 2″ x ½″ adhesive labels	10	.20	.13	.12

DEMAGNETIZER NO. 400

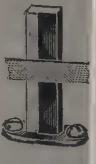


An AC magnet assembly provided with extended pole pieces. Will remove any permanent magnetism accumulated in recording head. 110-115 v., 60 cps.
Audio No. 400—Net.. **$6.00**

ALIGNMENT TAPE NO. 200

Prerecorded at 2 kc, 10 kc and 15 kc for precise alignment of magnetic recording heads. Recorded at 15″ per second. 300-ft. tape wound on 4″ reel.
Audio No. 200—Net Each.. **$6.00**

NEW NO. 500 "ECHORASER" KIT



Remarkably ingenious device removes more than 9 db of print-through without damage to the recorded signal. Intended for professional equipment, the kit can be adapted for home recorders. Mounts between the supply reel and the reproducing head on simple base plate. Two energized areas: One (red) reduces weak print-through signals; second (black) erases up to 18 db with sacrifice of 2 to 3 db of recorded high frequencies. Works well on any domestic tape. Kit includes base plate, mounting screws and two (red and black) "Echorasers". Instructions supplied.
Audio No. 500—Net Each.............. **$7.50**

TAPE RECORDER HANDBOOK

"How to Make Good Tape Recordings" contains up-to-the-minute data of interest and practical value for everyone. Diagrams, charts and photographs assist for easy understanding. 150 pages.
Audio No. 25C—Cloth bound. Net Each.............. **$2.50**
Audio No. 15P—Paper bound. Net Each.................. **$1.50**

RECORDING HEAD CLEANER

Liquid designed specifically for cleaning recording heads; superior to carbon tetrachloride. Comes in one-ounce bottle with brush.
Audio No. 1HC—
Net Each.. **43c**

WALSCO RECORDER "KLEEN-TAPE"

Takes only two minutes to leave the recording head of your tape recorder entirely clean and can be used many times over, due to special formula of cleaner engineered to impregnate in long wearing, multiple cleaning tape. Eliminates the necessity of removing screws and head covers when recording heads need cleaning by simply feeding it through at normal playing speed and then rewinding.
Walsco Model 335 Kleen-Tape—100-foot plastic reel. **$1.77**
Net Each...

Audio Devices Discs and Needles

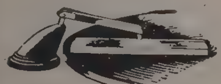
audiodiscs

FOR EVERY RECORDING NEED

AUDIODISCS are high quality, precision-made instantaneous recording blanks which have established new standards of perfection and won the acclaim of professional and amateur recordists. Designed for all high fidelity recording. Audiodiscs meet every need with a type for each application.

DESCRIPTION	Size, In.	Apx Thk In.	Approx. Record'g Time, Minutes		List Price Per Disc	Std. Pkgs. Contain	Net Price Per Disc in Std. Pkg.
			33 RPM	78 RPM			
RED LABEL Standard throughout the recording profession, Red Label AUDIODISCS exceed the professional demands of broadcasting stations, sound and movie studios and other exacting applications where top quality and dependability are essential requirements. They are the finest discs obtainable. Double-sided with center-pin and three drive-pin holes. Embossed label. Envelopes supplied in package. ***New 45 RPM.**	7*	.050	.....	.....	$1.40	25	$0.84
	8	.040	.....	2¼	1.10	25	.66
	10	.040	8	3½	1.55	25	.93
	12	.050	10	5	2.55	25	1.53
	16	.050	15	.....	4.60	25	2.76
SINGLE FACE RED LABEL In instances where professional recordists need to record on only one side of a disc, Single Face Red Label AUDIODISCS are available. Both sides are coated with the recordable side identified with embossed label. These discs have exactly the same fine qualities as standard Red Label and bring real economy to applications requiring but one side. Center-pin and three drive-pin holes. Envelopes supplied in package.	12	.050	10	5	2.00	25	1.20
	16	.050	15	.....	3.70	25	2.22
YELLOW LABEL The popular choice for all general purpose recording, Yellow Label AUDIODISCS are of high uniform quality. They are designed primarily for commercial recording studios, educational institutions, home recordists and other applications where the super quality Red Label AUDIODISCS are not required. Center-pin and three drive-pin holes. Paper label. Packaged in paper envelopes.	7	.050	.....	.....	1.19	25	.72
	8	.040	.....	2¼	.93	25	.56
	10	.040	8	3½	1.24	25	.74
	12	.050	10	.....	2.00	25	1.20
	16	.050	15	.....	3.70	25	2.22
REFERENCE LABEL Especially adapted for making test cuts, filing and reference recordings, auditions and equipment adjustments. Reference Label AUDIODISCS fill a definite need. Since this work does not demand complete freedom from minor surface imperfections, these discs fully meet the necessary requirements. Center-pin and three drive-pin holes. Paper label. Packaged in paper envelopes.	10	.040	8	3½	1.05	25	.63
	12	.050	10	5	1.55	25	.93
	16	.050	15	.....	2.77	25	1.66
BLUE LABEL For schools, homes, amateur and demonstration work. Blue Label AUDIODISCS offer the very best in recording quality at a low price. Made of exactly the same materials used in the manufacture of professional type of AUDIODISCS—except on a thinner aluminum base. Center-pin and three drive-pin holes. Paper label. Packaged in paper envelopes.	6½	.027	.....	1¼	.50	50	.30
	8	.027	.....	2¼	.70	50	.42
	10	.027	8	3½	1.00	50	.60
MASTERS Where copies of recordings (pressings) are to be made by the electroplating process, Master AUDIODISCS are the outstanding choice. The excellence and consistent quality of these discs are well-known to all record processors. Master AUDIODISCS give fine results with either the gold sputtering or silvering process. These oversized discs are coated an extra thick aluminum base. Double-sided and Single Face. Center-pin and one drive-pin hole. Envelopes supplied in package.	Double-sided						
	10	.050	.....	3½	2.50	25	1.50
	12	.050	.....	5	3.20	25	1.92
	13¼	.065	.....	5	4.05	25	2.43
	16	.050	.....	.....	5.95	25	3.57
	17¼	.065	15	.....	6.95	25	4.17
	Single Face						
	10	.050	.....	3½	2.00	25	1.20
	12	.050	.....	.....	2.50	25	1.50
	13¼	.065	.....	5	2.95	25	1.77
	16	.050	.....	.....	4.70	25	2.82
	17¼	.065	15	.....	5.10	25	3.06

CHIP-CHASER



The Chip-Chaser automatically and infallibly brushes the thread toward the center, winding it up on the overhead post or drive pins, as the case may be. Fits any machine or turntable. Self-aligning—flexible joints, no adjustment necessary. Convenient—tips up out of the way when not in use.

Audio No. CC12—For up to 12" turntable. Net Each............ $4.74

Audio No. CC16—For up to 16" turntable. Net Each............ $5.37

HOW TO MAKE GOOD RECORDINGS

An authoritative handbook on all phases of recording equipment, materials and technique. Completely revised and expanded edition. Profusely illustrated with scores of photographs, charts and drawings. Written in non-technical language. Covers how a recorder works, selection of a recorder, requirements of a recording disc, recording for home movies and every other phase of recording. 144 pages. Price Each.................... $1.20

WATCH FOR NEW RECORDING ACCESSORIES ENGINEERED BY AUDIO DEVICES

RECORDING AUDIOPOINTS®

audiopoints
RECORDING

Sapphire No. 14—This AUDIOPOINT has long been recognized by recording engineers as the best recording stylus made. The jewelled point, with 87° included angle, correct radius and fine polish, cuts a silent, shiny groove for many hours. It is especially designed to insure proper thread throw and each stylus is disc tested on a recording machine just before packaging, thus guaranteeing quality and uniformity. Can be resharpened a number of times. Supplied with short or long dural shank. Net Each.......... $4.95

Sapphire No. 20—Especially designed for professional microgroove recording. Short or long dural shank. Can be resharpened. Net Each............ $4.95

Stellite No. 34—A favorite with many professional and non-professional users. Specify short or long shank, flat or round on short shank. 87° included angle. Net Each..................... $1.50

Sapphire No. 202—A professional recording stylus with brass shank ideally suited for those recordists not requiring the super quality of Sapphire AUDIOPOINT No. 14. Supplied with short or long shank. Can be resharpened. Net.. $3.96

Diamond-Lapped Steel No. 50—Most practical stylus for use by non-professional recordists. Cannot be resharpened. Mounted 3 per card. Net Price... $1.05

PLAYBACK AUDIOPOINTS®

audiopoints
PLAYBACK

Sapphire No. 113—The outstanding choice of professional recordists. Materials, workmanship and design make this playback sapphire the finest obtainable. Reproduces recorded sound with complete fidelity and minimum disc wear. One of these points will play thousands of instantaneous recordings or vinyl transcriptions. NOT FOR USE ON SHELLAC RECORDS. Can be repolished. Net Each..................... $2.70

Sapphire No. 123—For professional use with microgroove recordings. Net Each.................... $1.20

"Red Circle" Sapphire No. 103—With straight dural shank and a fine polished jewel. Excellent for instantaneous recordings and vinyl transcriptions. Complete fidelity and minimum disc wear. Also ideal for phonograph records. Net Each.................... $1.20

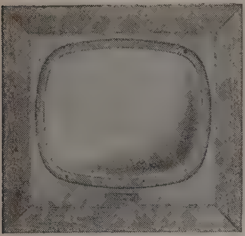
"Red Circle" Sapphire No. 303—This is the same playback point as No. 103, but with a bent dural shank. It is thus particularly adapted for heavy pickups. Net Each.................... $1.20

Steel Transcription Needle No. 151—These are the best steel needles made and 100% shadowgraphed, meaning that each needle has been examined with a machine which throws a greatly enlarged shadow of the point on a screen. In this process all imperfect needles are rejected. **Envelope of 20**—Net............ 15c

747-59A

TV Chassis, Tape Accessories

CONRAC "FLEETWOOD" CUSTOM REMOTE TELEVISION RECEIVERS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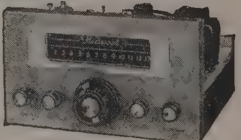
- REMOTE CONTROL
- TRUE AUDIO-VIDEO FIDELITY
- SAME PERFORMANCE STANDARDS AS CONRAC TV STATION MONITORS


Remote Tuner

810B

Custom engineered television puts your receiver where you want it: In console cabinetry; built-in wall mounting; bookshelf placement; wall or ceiling hung; with or without remote control facilities. Engineered for high performance, these chassis provide wide bandpass, with minimal geometric distortion. Automatic gain control maintains constant picture and sound over a wide range of signal strengths. Use of silicon rectifiers and full power transformer assures dependability and trouble-free service.

FLEETWOOD 900 "DA VINCI" SYSTEMS

Outstanding development in television design. Features video master sound adaptable to hi-fi systems; 21" short-necked 110° picture tube with safety glass curved and laminated to the tube for amazing brightness; wide viewing angle, easy cleaning; free from glare. Compact design fits standard bookshelves for built-in appearance; requires only 10¼" depth from wall surface when wall mounted. Decorative picture frames complete your custom installation. Available with remote or self-contained controls. Unusual control facilities include definition control for picture texture adjustment from diffused, soft light to stark newsreel appearance. Two separate audio outputs provide connection to a loudspeaker and to existing hi-fi systems. **Remote Tuner:** Provided with Model 900; includes every required control for tuning; not merely a channel changer. Nutrode turret type tuner employs: Volume/Off, Channel Selector/Fine Tuning; Brightness; Contrast and Definition Controls; edgelit Tuning Dial. May be operated at any distance from picture chassis; supplied with 40 ft. cable. Provides separate cathode followers for audio and video circuits. **Size:** 11½" w. x 9" d. x 7" h. **Picture Chassis:** Models 900 and 910 identical except self-contained controls on Model 910. **Size:** 23" w. x 14⅛" d. x 12½" h, overall; wall mounting depth, 10¼". Comes complete with picture tube (21" diagonal size), safety glass mask, cemented-on safety glass and utility cabinet; less speaker.

Conrac Fleetwood 900 System—Two-chassis system with remote control and 21" CRT. Shipping Weight, 107 lbs. Net Each.................................... **$399 00***

Conrac Fleetwood 910 System—Single chassis system with self-contained controls. Wt., 93 lbs. Net.. **$359 00***

Conrac Fleetwood 910 UHF System—Same as 910 system but with all-channel UHF-VHF tuning. Weight, 95 lbs. Net Each.................................... **$389 00***

*Including 10% F.E.T.

FLEETWOOD WIDE-SCREEN 800 SYSTEMS

Accommodates 24" or 27" rectangular 90° kine tube. Complete with 27 tubes, exclusive of picture tube. Supplies audio power for speaker and has audio outputs for connecting with existing sound or high fidelity system, (a) low level high impedance, and (b) low level cathode follower. Tuner may be operated 40 ft. or more from chassis. **Remote Tuner:** Same as for 900 system. Four IF stages for 4 mc bandpass. Separate audio and video cathode follower circuits. Super Cascode Turret adapts readily to UHF by interchange of strips and insertion of correct channel numbers. Comes complete with set of numerals from 2 to 82. Furnished with 40-ft. cable, ion trap, all knobs and gold colored escutcheon plate for easy access to secondary controls. **Picture Chassis:** Models 800 and 810B identical except controls are self-contained on Model 810B. **Size:** 25" w. x 25" h. using 24CP4A tube and 824BF accessory kit; 30" w. x 28½" h. using 27RP4 tube and 827BF accessory kit. **Picture tube not included.**

Conrac Fleetwood 800 System—Two-chassis system with remote control. Shpg. Wt., 65 lbs. Net Each.. **$299 50***

Conrac Fleetwood 810B System—Single chassis system. Shipping Weight, 50 lbs. Net Each.......................... **$249.50***

TUNER CABINETS

Conrac Fleetwood 84 Tuner Cabinet—Beautifully styled hardwood veneer in wide choice of finishes. **Size:** 12⅜" w. x 9⅝" d. x 7¾" h. State finish wanted. Weight, 4 lbs.

Mahogany or walnut Finish. Net Each...............	**$19.95**
Blond or maple Finish. Net Each.....................	**21.95**
Unfinished. Net Each..................................	**16.95**

CHASSIS MOUNTING ACCESSORIES

Conrac Fleetwood 921BX—Shadow box mounting frame for 900 or 910 chassis; unfinished. Net Each............... **$17.50***

Conrac Fleetwood 921SM—Same, but surface mount. Net Each.. **$13.50***

Conrac Fleetwood 824BF—Accessory kit with unfinished frame, glass and mask for 800 or 810B with 24" tube. Net Ea. **$29.50***

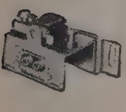
Conrac Fleetwood 827BF—Same, but for 27" tube. Net **29.50***

Conrac Fleetwood 804B—24" tube mounting kit for 800 or 810B chassis; with tube holders and connector. Net Each..... **$6.00***

Conrac Fleetwood 807B—Same, but for 27" tube. Net.. **6.00***

*Includes 10% F.E.T. where applicable.

NORTRONICS STEREO TAPE CONVERSION KITS, ACCESSORIES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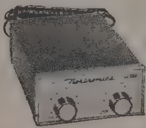
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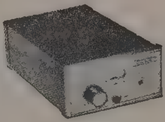
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STEREO CONVERSION KITS

Model SK-100 Kit (Fig. A)—Converts most monophonic tape recorders for playback and recording of half-track stereo tapes. Wired and assembled, unit mounts on side of the recorder with detachable bracket. Kit includes high output monophonic magnetic head for recording and playback; has 50 db cross talk rejection; response of 30-12,000 cps, ±3 db, at 7½"/sec. when properly equalized. Output, 4 mv at 1 kc with excellent hum shielding. Recommended for use with two PL-100 playback amplifiers or single PL-100 with recorder's audio system for playback; two RA-100 amplifiers for recording. Net Each........ **$23 50**

Model SK-50 Stereo Kit—Similar to SK-100, but for conversion to new quarter-track, 4-channel stereo tapes. TLD-L1 head provides frequency response of 30-12,000 cps, ±3 db at 3¾"/sec.; output, 2 mv at 1 kc. May also be used with most 2-channel prerecorded tapes. Net Each............................ **$26.00**

Model EK-100 Erase Attachment—Handy attachment fits on either side of the SK-100 to provide selective stereo or monophonic erase applications. Uses SE-100 erase head that operates from RA-100 amplifier. Net Each.......................... **$14.50**

Model EK-50 Erase Attachment—Similar to EK-100 but provides erasing operation for 4-channel stereo tapes. Uses SE-50 erase head. Net Each.................................. **$14.00**

STEREO AMPLIFIERS

Model PL-100 Playback Amplifier (Fig. B)—Compact, high quality amplifier with ample gain to match any high-Z tape head; can also be used as a preamp to drive a more powerful amplifier. Equalization control permits 15 db variation in frequency response at 10 kc. Two units are recommended for use with stereo kits, left, or any stereo phono cartridge. **Power Output:** 3 watts. **Frequency Response:** ±2 db, 30-15,000 cps. **Distortion:** Less than 2% total harmonic. **Controls:** Volume and Equalization, both continuously variable. **Inputs:** Low level magnetic tape and phono cartridge; high level tuner or ceramic cartridge. **Outputs:** 4, 8, 16 ohms; preamp 1 volt cathode follower. **Tubes:** 4. **Power Required:** 25 watts, 110-120 v. AC, 60 cps. **Size:** 5⅜" w. x 8" d. x 2⅝" h. in screened metal case. Weight, 6 lbs. Net Each.. **$39 50**

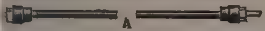
Model RA-100 Recording Amplifier (Fig. C)—A natural for stereo conversion. Features NAB equalization, VU meter, audio monitor jack and low level input for mike, phono cartridge, etc. for dubbing or copying. Provides audio power for tape head, bias voltage and erase head power. **Inputs:** Low level mike, tape head or magnetic phono with 1 mv sensitivity at full recording level; high level tuner or ceramic cartridge has 0.2 v. sensitivity; all equalized at NAB. **Outputs:** Audio and 65 kc bias with rear panel current adjust; erase output for high-Z or low-Z head; Audio monitor jack for headphones or booster amplifier. **Signal-to-Noise Ratio:** 55 db. **Synchronization:** Two units interconnect to synchronize oscillators to prevent beating. **Tubes:** 4. **Power Required:** 15 watts, 110-120 v. AC, 60 cps. **Size:** 5⅜" w x 8" d. x 2⅝" h. in screened metal case. Weight, 6 lbs. Net Each......... **$57 50**

STEREO RECORD/PLAY SWITCH

Five pushbuttons select upper and lower track recording and playback. Prevents leakage into amplifiers and accidental erasure. Permits monitoring and mixing. Ideal for four-channel monophonic systems; use with RA-100's. Synchronizes bias and prevents beats in stereo. **Size:** 2⅝" x 5⅜" x ⅞".

Nortronics Model SW-80—Net Each................ **$25 50**

arker Stereo-Audio Cables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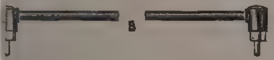
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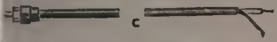
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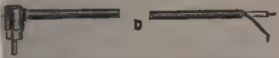
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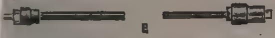
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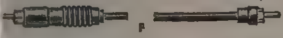
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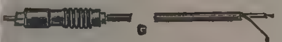
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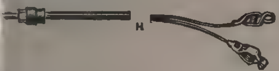
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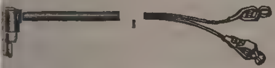
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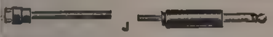
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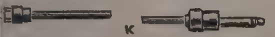
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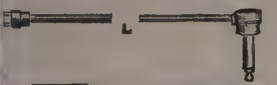
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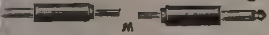
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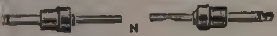
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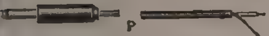
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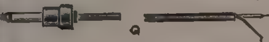
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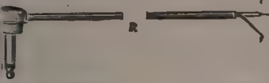
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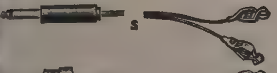
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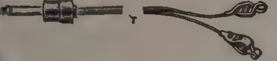
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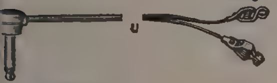
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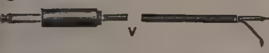
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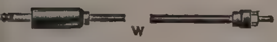
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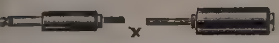
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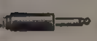
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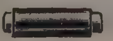
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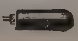
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The world's largest listing of Hi-Fi, Stereo and Audio cables. Plugs are solid plastic units, molded directly onto the wire ends to provide unfailing performance and unexcelled appearance. Made by the inventors of exclusive "Venar" molding process, famous for reliability. "Molded-On*" plugs are completely shielded, noise free, low loss, low capacity, waterproof and indestructible.
*Trade Mark

PHONO-STEREO SERIES

Model No.	Fig.	Cable Length	Type Cable and Plugs	Net Each
18″ MM	A	18 in.	Shielded cable; 2 phono plugs	$0.66
36″ MM	A	36 in.	Shielded cable; 2 phono plugs	.72
72″ MM	A	72 in.	Shielded cable; 2 phono plugs	.90
12′ MM	A	12 ft.	Shielded cable; 2 phono plugs	1.35
15′ MM	A	15 ft.	Shielded cable; 2 phono plugs	1.50
18″ RM	B	18 in.	Shielded cable; 2 right-angle phono plugs	.66
36″ RM	B	36 in.	Shielded cable; 2 right-angle phono plugs	.72
72″ RM	B	72 in.	Shielded cable; 2 right-angle phono plugs	.90
12′ RM	B	12 ft.	Shielded cable; 2 right-angle phono plugs	1.35
15′ RM	B	15 ft.	Shielded cable; 2 right-angle phono plugs	1.50
18″ MS	C	18 in.	Shielded cable; stripped end, phono plug	.51
36″ MS	C	36 in.	Shielded cable; stripped end, phono plug	.63
72″ MS	C	72 in.	Shielded cable; stripped end, phono plug	.75
12′ MS	C	12 ft.	Shielded cable; stripped end, phono plug	1.20
15′ MS	C	15 ft.	Shielded cable; stripped end, phono plug	1.35
18″ RS	D	18 in.	Shielded cable; stripped end, right-angle plug	.51
36″ RS	D	36 in.	Shielded cable; stripped end, right-angle plug	.63
72″ RS	D	72 in.	Shielded cable; stripped end, right-angle plug	.75
12′ RS	D	12 ft.	Shielded cable; stripped end, right angle plug	1.20
15′ RS	D	15 ft.	Shielded cable; stripped end, right angle plug	1.35
18″ MF	E	18 in.	Shielded cable; phono plug, phono jack	.81
36″ MF	E	36 in.	Shielded cable; phono plug, phono jack	.90
72″ MF	E	72 in.	Shielded cable; phono plug, phono jack	1.11
36″ LMM	F	36 in.	Shielded cable; extra long phono plug, std. phono plug	.99
72″ LMM	F	72 in.	Shielded cable; extra long phono plug, std. phono plug	1.20
12′ LMM	F	12 ft.	Shielded cable; extra long phono plug, std. phono plug	1.59
15′ LMM	F	15 ft.	Shielded cable; extra long phono plug, std. phono plug	1.74
36″ LMS	G	36 in.	Shielded cable; stripped end, extra long phono plug	.90
72″ LMS	G	72 in.	Shielded cable; stripped end, extra long phono plug	.99
12′ LMS	G	12 ft.	Shielded cable; stripped end, extra long phono plug	1.44
15′ LMS	G	15 ft.	Shielded cable; stripped end, extra long phono plug	1.59
12′ MC	H	12 ft.	Parallel cord; phono plug, alligator clips	1.11
15′ MC	H	15 ft.	Parallel cord; phono plug, alligator clips	1.20
12′ RC	I	12 ft.	Parallel cord; right-angle phono plug, alligator clips	1.11
15′ RC	I	15 ft.	Parallel cord; right-angle phono plug, alligator clips	1.20

PHONE-STEREO SERIES

72″ LPM	J	72 in.	Shielded cable; long phone plug, phono plug	$1.41
12′ LPM	J	12 ft.	Shielded cable; long phone plug, phono plug	1.89
15′ LPM	J	15 ft.	Shielded cable; long phone plug, phono plug	2.04
72″ SPM	K	72 in.	Shielded cable; short phone plug, phono plug	1.35
12′ SPM	K	12 ft.	Shielded cable; short phone plug, phono plug	1.80
15′ SPM	K	15 ft.	Shielded cable; short phone plug, phono plug	1.95
72″ RPM	L	72 in.	Shielded cable; right-angle phone plug, phono plug	1.35
12′ RPM	L	12 ft.	Shielded cable; right-angle phone plug, phono plug	1.80
15′ RPM	L	15 ft.	Shielded cable; right angle phone plug, phono plug	1.95
72″ LPP	M	72 in.	Shielded cable; 2 long phone plugs	2.01
12′ LPP	M	12 ft.	Shielded cable; 2 long phone plugs	2.16
15′ LPP	M	15 ft.	Shielded cable; 2 long phone plugs	2.34
72″ SPP	N	72 in.	Shielded cable; 2 short phone plugs	1.71
12′ SPP	N	12 ft.	Shielded cable; 2 short phone plugs	1.98
15′ SPP	N	15 ft.	Shielded cable; 2 short phone plugs	2.19
72″ RPP	O	72 in.	Shielded cable; 2 right angle phone plugs	1.71
12′ RPP	O	12 ft.	Shielded cable; 2 right angle phone plugs	1.98
15′ RPP	O	15 ft.	Shielded cable; 2 right angle phone plugs	2.19
72″ LPS	P	72 in.	Shielded cable; stripped end, long phone plug	1.29
12′ LPS	P	12 ft.	Shielded cable; stripped end, long phone plug	1.74
15′ LPS	P	15 ft.	Shielded cable; stripped end, long phone plug	1.89
72″ SPS	Q	72 in.	Shielded cable; stripped end, short phone plug	1.20
12′ SPS	Q	12 ft.	Shielded cable; stripped end, short phone plug	1.65
15′ SPS	Q	15 ft.	Shielded cable; stripped end, short phone plug	1.80
72″ RPS	R	72 in.	Shielded cable; stripped end, right-angle plug	1.20
12′ RPS	R	12 ft.	Shielded cable; stripped end, right-angle plug	1.65
15′ RPS	R	15 ft.	Shielded cable; stripped end, right-angle plug	1.80
72″ LPC	S	72 in.	Parallel cord; long phone plug, alligator clips	1.38
12′ LPC	S	12 ft.	Parallel cord; long phone plug, alligator clips	1.68
15′ LPC	S	15 ft.	Parallel cord; long phone plug, alligator clips	1.77
72″ SPC	T	72 in.	Parallel cord; short phone plug, alligator clips	1.20
12′ SPC	T	12 ft.	Parallel cord; short phone plug, alligator clips	1.50
15′ SPC	T	15 ft.	Parallel cord; short phone plug, alligator clips	1.59
72″ RPC	U	72 in.	Parallel cord; right-angle plug, alligator clips	1.20
12′ RPC	U	12 ft.	Parallel cord; right-angle plug, alligator clips	1.50
15′ RPC	U	15 ft.	Parallel cord; right-angle plug, alligator clips	1.59
72″ TPS	V	72 in.	Shielded cable; stripped end, miniature phone plug	1.50
12′ TPS	V	12 ft.	Shielded cable; stripped end, miniature phone plug	1.86
72″ TPM	W	72 in.	Shielded cable; phono plug, miniature phone plug	1.65
12′ TPM	W	12 ft.	Shielded cable; phono plug, miniature phone plug	2.01

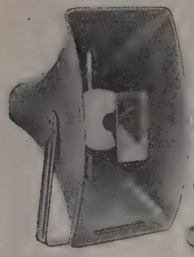
FULLY SHIELDED MICROPHONE EXTENSIONS

12′ PJ	X	12 ft.	Shielded cable; shielded phone jack, long phone plug	$2.46
24′ PJ	X	24 ft.	Shielded cable; shielded phone jack, long phone plug	3.24

FULLY SHIELDED ADAPTERS

APF	Y	....	Phono jack to phone plug adapter	$0.75
AFF	Z	....	Phono jack to phono jack adapter	.60
PJM	ZZ	....	Phone jack to phono plug adapter	1.20
AKT	....	....	Assorted Kit—1 each of above adapters	2.46

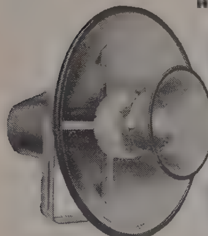
Electro-Voice PUBLIC ADDRESS HORNS AND DRIVERS



FC100

HC1000

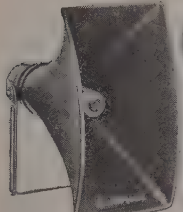
HD1000



AC100

DC30A

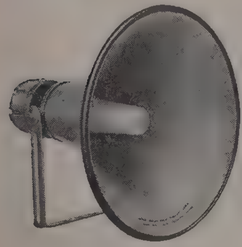
DC40 DC50



FR150

DC30T

DC40T DC50T



AR150

PROJECTOR HORNS

Completely new designs assure finest performance with Electro-Voice projector horns. Two basic types from which to choose . . . compound and reentrant.

Exclusive compound horns permit widest range at lowest distortion, plus complete directional control of both highs and lows. Best wide-angle coverage with exclusive diffraction horns means better sound through entire coverage area for uniform coverage. Concentrating compound horn provides highest efficiency at lowest distortion. Natural voice and music reproduction result in higher intelligibility without annoying peaks.

Model FC100—Similar to the famous CDP, the FC100 provides two diffraction horns for uniform wide-angle coverage. Frequency response is not compromised since both horns are ideally designed to handle a specific portion of the range. Compound horn reduces distortion far below any other projector design. Flexible coverage control provided by individual adjustment of each horn, or concentrating high-frequency horn (HC1000) can be substituted for small diffraction horn. Large horn is of fiberglass with Mesa Tan finish molded in. Use any E-V convertible driver. Specifications: Low-frequency horn—cut-off, 100 cps; taper, 100 cps; air column length, 58"; sound distribution, 90° x 120°. High frequency sound distribution, 90° x 120°; crossover, 1,000 cps. Mouth size, 10½" x 20½", depth (less driver), 20". Net Wt. (less driver), 10¾ lbs. Shpg. Wt., 12¼ lbs. Net **$28.50**

Model AC100—Concentrating version of CDP. Has all of the quality advantages of FC100, except utilizes round horns for most concentrated coverage with greatest efficiency. Retains compound design for lowest distortion—widest range. Diffraction high-frequency horn (HD1000) can be substituted for concentrating horn for flexible coverage control. Use any E-V convertible driver. Specifications: Low-frequency horn—cut-off, 100 cps; taper, 100 cps; air column length, 54"; sound distribution, 80°. High-frequency sound distribution, 30°; crossover, 1,000 cps. Diameter, 21"; depth (less driver), 16"; Net Wt. (less driver), 11 lbs. 6 oz. Shpg. Wt., 13½ lbs. Net Each........................**$26.70**

Model HD1000—Diffraction horn for converting AC100 to wide-angle (60° x 120°) coverage above 1,000 cps. Shipping Weight, 1½ lbs. Net Each........................**$3.90**

Model HC1000—Concentrating horn for converting FC100 to concentrated (30°) coverage above 1,000 cps. Shipping Weight, 4 lbs. Net Each........................**$6.00**

Model 848—Combines FC100 Compound Diffraction Horn plus DC30 Compound Driver for finest wide-angle sound, lowest distortion, highest sound quality of any projector. Specifications: Frequency response, 150-10,000 cps; impedance, 16 ohms; dispersion, 90° x 120°; power handling capacity, 30 watts; sound pressure level, 117 db; dimensions, 10½" x 20½" x 20"; Net Weight, 12 lbs.; Shpg. Wt., 17 lbs. Complete—Net Each....**$45.00**
Model 848-45—With 45-ohm voice coil. Net Each........................**$45.90**

Model 848LT—Long Throw CDP (with 1000 cycle concentrating horn). For projecting intelligible, extended range sound over great distances—limiting dispersion to a selected area. Allows pinpointing sound to a selected audience, with increased sound level on-axis. Specifications: Frequency response, 150-10,000 cps; power handling capacity, 30 watts; sound pressure level, 117 db; dispersion, 50°; nominal impedance, 16 ohms; Size, 20½" x 10½" x 21"; Net Weight, 16 lbs. 6 oz.; Shipping Wt., 20 lbs. Complete—Net Each.**$45.00**
Model 848LT-45—With 45-ohm voice coil. Net Each........................**$45.90**

New reentrant horns provide wider range than ever before at lowest cost. Unique E-V ring reflector design provides better balanced highs than possible with conventional exponential designs, by reducing high frequency losses often encountered in reentrant horns. Smoother response plus added useful range increases intelligibility and adds to more natural sound. Rugged aluminum die cast mounting plate plus precision die cast reentrant tubes assure long-lasting performance. Heavy spun aluminum round bell or fiberglass rectangular horn provides either concentrated coverage or medium angle coverage. Electro-Voice Reentrant Horns accept any standard driver with 1⅜"-18 threads.

Model FR150—Reentrant Horn. Medium-angle low-cost rectangular horn provides good coverage at low cost. Virtually indestructible fiberglass horn has Mesa Tan color molded in. Adjustable mounting angle allows best coverage. Can be stacked for multiple speaker applications. Ideal for car-top installation or wherever low silhouette is needed, and where bass response cannot be sacrificed. Accepts Electro-Voice convertible drivers or any standard driver with 1⅜"-18 thread. Specifications: Low-frequency cut-off, 150 cps; taper, 150 cps; air column length, 45"; sound distribution, 70° x 100°; mouth size, 10½" x 20½"; depth (less driver), 21"; Net Wt. (less driver), 9½ lbs. Shpg. Wt., 12 lbs. Net **$22.20**

Model AR150—Reentrant Horn. Round concentrating horn for maximum penetration at lowest cost. E-V ring reflector plus precision new exponential design contributes to widest range yet achieved from this horn type. Smoother curve results in high intelligibility, and remarkably natural voice and music quality. Rubber-edge damping ring eliminates resonances. High-efficiency design allows more useful volume from driver over entire range. Accepts Electro-Voice Convertible drivers or any standard driver with 1⅜"-18 thread. Specifications: Low-frequency horn—cut-off, 150 cps; taper, 150 cps; air column length, 41"; sound distribution, 85°; diameter, 21"; depth (less driver), 17". Net Weight (less driver), 6½ lbs. Shipping Weight, 8 lbs. Net Each..............**$18.60**

VERSATILE CONVERTIBLE DRIVERS

Now, for the first time, here are drivers that can be used interchangeably in compound or reentrant horns. Used on either type of horn, the new Electro-Voice Convertible Drivers feature highest efficiency available. Increased power handling plus extra increased efficiency make the 40 and 50-watt drivers uniquely useful where high power at minimum cost is essential. The high efficiency of all E-V Convertible Drivers is achieved without resorting to "peaked" response which may increase loudness, but does reduce intelligibility. The smooth response of these drivers insures most natural reproduction of voice and music for more satisfying quality with vastly reduced feedback problems and greatly increased tonal range. Double flux ceramic magnets provide long-lasting high efficiency in entirely new low-loss magnetic circuits. Edgewise-wound ribbon voice coils give 18% more energy.

The drivers are rugged and weatherproof; conversion to either reentrant or compound use can be made instantly in the field. Voice coils are also field replaceable, thus reducing repair costs to a minimum. E-V Convertible Drivers are available with 16 or 45-ohm voice coils or with built-in 70.7-volt line constant voltage transformers. This entirely new design concept gives better performance at minimum cost, making E-V Drivers your best buy.

		DC30A	DC30T	DC40	DC40T	DC50	DC50T
Frequency Response††		150-10,000	150-10,000	140-11,000	140-11,000	140-11,000	140-11,000
Program Power Capacity		30	30	40	40	50	50
Sound Pressure Level†	FC100 Compound Horn	120 db	120 db	123 db	123 db	127 db	127 db
	AR150 Reentrant Horn	126 db	126 db	129 db	129 db	133 db	133 db
Voice Coil Impedance		16**	16	16**	16	16**	16
Transformer Impedances, Ohms		....	167, 333, 1000, 2000	....	125, 250, 500, 1000	....	100, 143, 200, 500
Transformer Power Taps, Watts		....	30, 15, 5, 2.5	....	40, 20, 10, 5	....	50, 35, 25, 10
Dimensions (overall)		5½" dia 3" l.	5½"dia. 5½"l	6¼"dia. 4¼"l.	6¼" dia. 6" l	6¼"dia. 4¼"l.	6¼" dia. 6" l.
Net Each		**$16.50**	**$22.20**	**$21.60**	**$27.90**	**$28.20**	**$34.50**

†Measured at 4' on-axis with full rated power from 500–1500 cps.
**Available with 45-ohm voice coil at $1.50 list additional.
††Measured on-axis with FC100 horn.

Electro-Voice PA SPEAKERS AND ACCESSORIES

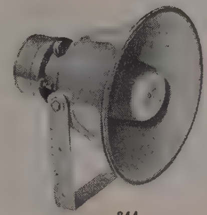
AGING SPEAKERS

ffective paging systems require not only efficient loudspeakers, but also natural sound ality free from peaks that cause listening fatigue and acoustic feedback. No better eakers for clear natural voice paging are available than the new Electro-Voice Model 4 and the improved Model 847 CDP.

odel 844—Low-cost paging speaker for medium-angle sound distribution. Features oothest response in its class with better lows to provide natural, pleasing paging witht feedback. Handles twice the power—30 watts—to reduce costs. Rugged diecast horn us field-replaceable voice coil keeps service costs at a minimum. Precision manufacturg assures long-lasting reliability under the toughest conditions.

pecifications: Frequency response, 250-13,000 cps; power handling capacity, 30 watts; minal impedance, 8 ohms; dispersion, 90°; EIA sensitivity rating, 51 db; sound pressure vel, 120 db; dimensions, 9⅞" diameter x 8 3/16" deep; Net Weight, 5 lbs. 10 oz.; Shipping eight, 8½ lbs. Net Each..**$20.70**

odel 844-45—Same as standard 844, but with 45-ohm voice coil for simple installation intercom systems. Net Each..**$21.60**

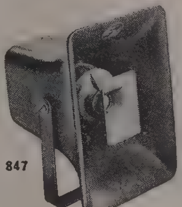


844

odel 847—Utilizing the famous CDP Principle—this newly improved wide-angle eaker provides higher articulation without annoying "peaked" response over a uniform 0° x 90° area. Extremely low distortion results from the use of TWO diffraction horns—ch covering only half of the voice range. 25-watt power handling capacity means more lume from fewer speakers. Fiberglass horn has Mesa Tan color molded in.

pecifications: Frequency response, 250-10,000 cps; power handling capacity, 25 watts; und pressure level, 118 db; dispersion, 90° x 120°; impedance, 16 ohms; dimensions, ¾" x 7¾" x 10 7/16"; Net Weight, 6½ lbs.; Shipping Weight, 10 lbs. Net Each **$27.80**

odel 847-45—Same as standard 847, but with 45-ohm voice coil for simple installation intercom systems. Net Each..**$28.70**



847

I-FI OUTDOOR WEATHERPROOF SPEAKERS

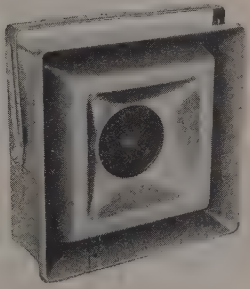
usicaster speaker system provides true high fidelity performance in a compact, portable stem. Sturdy aluminum diecast housing protects weatherproof cone speaker and exnds bass response through back-loaded folded horn. Dual Radax cone radiates smooth seful highs through 120° angle. Can be mounted anywhere or used as portable speaker. rovision for mounting 70.7-volt line transformer inside. Ideal for square dances, school uditoriums, clubs, outdoor hi-fi or anywhere that music and voice must be reproduced ith maximum clarity.

pecifications: Frequency response, 60-13,000 cps; nominal impedance, 8 ohms; dispersion, 20°; power handling capacity, 30 watts program; sound pressure level, 110 db; dimensions, 1½" x 21½" x 8½"; Net Weight, 31 lbs.; Shipping Weight, 34 lbs. Net Each **$48.00**

usicaster II—Same fine performance as Musicaster above, except has added brilliance d wider coverage from RE36 Very-High-Frequency Range Extender. Smooth reponse 18,000 cps. Complete with crossover. Net Weight, 33 lbs. Shipping Weight, 36 lbs. et Each..**$69.00**

odel MB-1—Surface mounting bracket allows mounting of any Musicaster flat against all for neat unobtrusive installation. Replace standard "U" bracket. Shipping Weight, lb. Net Each..**$2.70**

Musicaster



RANSFORMERS AND ACCESSORIES

odel TH—Transformer Housing. Provides neat weatherproof mounting of any E-V ansformer. Mount vertically or horizontally on any flat surface or on horn bracket. xclusive wattage indicator tells power setting at a glance. No soldering required with -V transformers. Size: 4" h., 5" w., 3½" d. Net Weight, 1 lb. 11 oz. Shipping Weight, ½ lbs. Net Each..**$4.80**

odel TR5—5-watt 70.7-volt line transformer. Primary impedance taps 1000, 2000, 000, 8000 ohms; 5, 2.5, 1.25 and .675-watt line power taps. 4, 8 and 16 ohms secondary npedances Accepts solderless terminals in TH housing. Frequency response ±2 db, 5-20,000 cps. Insertion loss 0.8 db. Overall dimensions 2" x 1 11/16" x 1⅜". Mounting hole enters, 1¾". Shipping Weight, 1 lb. Net Each..**$3.00**

odel TR15—Same as TR5 except 15-watt capacity with primary impedances of 333, 00, 1000, 2000 ohms and 15, 10, 5, 2.5-watt line power taps. Overall dimensions 1¾" h., ⅞" w., 2⅝" d. Mounting hole centers, 2⅝". Shipping Weight, 1½ lbs. Net Each **$3.60**

odel TR30—Same as TR5 except 30-watt capacity with primary impedances of 167, 50, 500, 1000 ohms and 30, 20, 10 and 5-watt line power taps. Overall dimensions 1¾" h., w., 2 5/16" d. Mounting hole centers, 2⅜". Shipping Weight, 1½ lbs. Net Each **$4.20**

odel TR50—Same as TR5 except 50-watt capacity with primary impedances of 100, 25, 200, 333 ohms and 50, 40, 25 and 15-watt line power taps. Overall dimensions 2" h., 5/16" w., 2¼" d. Mounting hole centers, 2⅜". Shipping Weight, 2 lbs. Net Each **$5.40**

Model AP-1—Pipe stand adapter for mounting any E-V speaker "U" bracket to standard ½" pipe. Shipping Weight, 1 lb. Net Each..**$1.20**

Model AD-1—Driver adapter allows use of E-V Convertible Driver on horns with 1 7/16"-16 hread (W.E.—RCA) for improved performance. Shpg. Wt., 1 lb. Net Each...**$1.50**

Model AD-2—Horn adapter allows use of E-V reentrant horns with drivers having 1 7/16"-16 hread (W.E.—RCA) for improved performance. Shpg. Wt., 1 lb. Net Each....**$1.80**

Model RA-1—Radial Adapter instantly converts FC100 horn or 848 projector to "radial" pplications. Superior to typical "360°" projectors. Diffraction horns give better spread nd adapter reflects sound off-axis, to eliminate hot spot. No tools required. Extends 2½" n front of FC100 horn with DC30A. Shpg. Wt., 1 lb. Net Each..............**$3.00**

Model RE35—Range Extender mounts on 848 or FC100 to improve response and dispersion of highs. 30-watt capacity. Response 3500-18,000 cps. 16 ohms impedance. Complete with crossover, mounting bracket. Shipping Weight, 4½ lbs. Net Each......**$24.00**

Model RE36—Range Extender Kit. Converts Musicaster to Musicaster II. Includes driver, bezel, crossover and wiring harness. Shipping Weight, 4½ lbs. Net Each **$22.50**

Model 879—Joining Kit for two or more 848, 848LT or FC100 horns in multiple array. ne kit required for each junction of two horns. Shpg. Wt., 1 lb. Net Each.....**$1.65**

MB-1

TH

AP-1

Diaphragm Replacement Kits allow easy field maintenance or conversion of E-V Drivers.

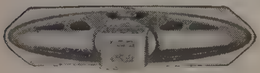
DRIVER	8 Ohm	16 Ohm	45 Ohm
828 or DC30	....	8923	8427
844 (DS30)	8410	....	8421
DC30A/DC30T	....	8577	8617
DC40/DC40T	....	8573	8618
DC50/DC50T	....	8574	8619
Net Each	**$6.00**	**$6.00**	**$6.90**

RA-1

RE35

Note: Sound Pressure Level is measured at 4' on-axis with full rated power from 500 to 1500 cps.

Speakers and Projectors


P314-T

P12-N

P10-S

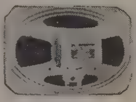
P8-R

P69-V

P57-U

P275-Y

P4-W


P46-W

JENSEN CONCERT SERIES SPEAKERS

CONCERT SERIES PM SPEAKERS

Nom. Size, Inches	Jensen No.	Mag. Wt.,* Oz.	Voice Coil			Dimensions, Inches			Net Each
			Imp., Ohms	Power Watts	Dia., In.	H. & W.	Depth	Baffle Opening	
2¾	**P275-Y**	0.65	16	0.15	9/16	2¾	1.1	2⅜	**$ 3.75**
3	**P3-W**	1.00	3.2	3.5	9/16	3	1 15/16	2⅝	**2.58**
3½	**P35-W**	1.00	3.2	4.0	9/16	3½	2	3⅛	**2.52**
4	**P4-W**	1.00	3.2	4.5	9/16	4 3/16	2¼	3½	**2.52**
4	**P4-WV**	1.00	45	4.5	9/16	4 3/16	2¼	3½	**2.61**
4	**P4-V**	1.47	3.2	5.0	9/16	4 3/16	2¼	3½	**2.88**
4 x 6	**P46-W**	1.00	3.2	4.5	9/16	4¼ x 6⅛	2 5/16	3 11/16 x 5 11/16	**2.97**
4 x 6	**P46-V**	1.47	3.2	5.0	9/16	4¼ x 6⅛	2 5/16	3 11/16 x 5 11/16	**3.30**
5	**P5-W**	1.00	3.2	5.0	9/16	4¾	2 5/16	4	**2.73**
5	**P5-WV**	1.00	45	5.0	9/16	4¾	2 5/16	4	**2.82**
5	**P5-V**	1.47	3.2	5.5	9/16	4¾	2 5/16	4	**2.91**
5	**P5-T**	3.16	3.2	6.0	¾	4¾	2 11/16	4	**4.44**
5¼	**P525-W**	1.00	3.2	5.5.	9/16	5¼	2 9/16	4½	**2.85**
5¼	**P525-V**	1.47	3.2	6.0	9/16	5¼	2 9/16	4½	**3.15**
5 x 7	**P57-V**	1.47	3.2	6.0	9/16	5 x 7¼	2⅞	4¼ x 6½	**3.57**
6	**P6-W**	1.0	3.2	6.0	9/16	6⅛	2¾	5¼	**2.91**
6	**P6-V**	1.47	3.2	6.5	9/16	6⅛	2¾	5¼	**3.18**
6	**P6-T**	3.16	3.2	7.5	¾	6⅛	3 3/16	5¼	**4.68**
6 x 9	**P69-V**	1.47	4	7.5	9/16	6⅜ x 9⅛	3 5/16	5¼ x 8⅛	**4.50**
7	**P7-V**	1.47	3.2	7.0	¾	7	3⅛	6⅜	**4.20**
8	**P8-U**	1.73†	3.2	9.0	1	7 11/16	3	6¾	**4.59**
8	**P8-T**	2.5‡	3.2	10.0	1	7 11/16	3 5/16	6¾	**5.34**
8	**P8-S**	4.64	8	11.0	1	7 11/16	3 13/16	6¾	**6.81**
8	**P8-R**	6.8	8	12.0	1	7 11/16	4	6¾	**7.95**
10	**P10-T**	2.5‡	3.2	11.0	1	10⅛	5¼	8¾	**6.45**
10	**P10-S**	4.64	8	12.0	1	10⅛	5¼	8¾	**8.61**
12	**P12-T**	2.5‡	3.2	12.0	1	12⅛	6 1/16	10½	**7.08**
12	**P12-S**	4.64	8	13.0	1	12⅛	6 1/16	10½	**9.51**
12	**P12-R**	6.8	8	14.0	1	12⅛	6 1/16	10½	**10.41**
12	**P12-P**	14.6	8	18.0	1½	12⅛	6 7/16	10½	**20.16**
12	**P12-N**	27.0	8	20.0	1½	12 1/16	7	10½	**31.50**
14 x 3	**P314-T**	3.16	3.2	7.5	¾	3½ x 14 3/16	3⅛	2¾ x 13 3/16	**7.65**
15	**P15-P**	14.6	8	20.0	1½	15⅛	8	13¼	**27.15**
15	**P15-N**	27.0	8	25.0	1½	15⅛	8	13¼	**36.90**

*All Magnets DP Alnico 5. All 10", 12" and 15" speakers equipped with magnet covers. ‡Performance equivalent to EIA 3.16 oz. †Performance equivalent to EIA 2.15 oz.

CONCERT SERIES FIELD COIL SPEAKERS

Nom. Size, In.	Jensen No.	Stock No.	Voice Coil*		Field		Dimensions, Inches			Net Each
			Power Watts	Dia., In.	Resist. Ohms	Power Watts	H. & W.	Depth	Baffle Opening	
5 x 7	**F57-W**	ST-884	5.5	9/16	85	5.0	5 x 7¼	2¾	4¼ x 6½	**$3.75**
6	**F6-X**	ST-189	5.0	9/16	450	4.5	6⅛	2 15/16	5¼	**3.30**

*All Voice Coil Impedances are 3.2 Ohms.

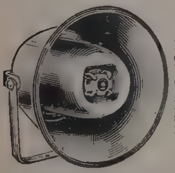
CONCERT SERIES SPECIAL OVAL GROUP FOR AUTO USE

Nom. Size, Inches	Jensen No.	Mag. Wt.,* Oz.	Voice Coil			Dimensions, Inches			Net Each
			Imp., Ohms	Power Watts	Dia., In.	H. & W.	Depth	Baffle Opening	
5 x 7	**P57-U**	1.73†	3.2	8.0	1	5 x 7¼	2½	4¼ x 6½	**$4.32**
5 x 7	**P57-TX§**	2.5‡	3.2	9.0	1	5 x 7¼	2 13/16	4¼ x 6½	**5.01**
6 x 9	**P69-U**	1.73†	3.2	9.0	1	6⅜ x 9⅛	3⅛	5¼ x 8⅛	**4.68**
6 x 9	**P69-T**	2.5‡	3.2	10.0	1	6⅜ x 9⅛	3 5/16	5¼ x 8⅛	**5.19**
6 x 9	**P69-TX§**	2.5‡	3.2	10.0	1	6⅜ x 9⅛	3 5/16	5¼ x 8⅛	**5.37**

§High Fidelity Model. *All Magnets DP Alnico 5. †Performance Equivalent to EIA 2.15 oz. ‡Performance Equivalent to EIA 3.16 oz.

ATLAS HIGH FIDELITY PROJECTORS

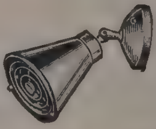
MODEL WT-6
"COAX-PROJECTOR"



High fidelity, all-weather, outdoor-indoor reproducer. Two-way system combines two drivers (one weather-proof, cone-type with 6" throat for lows; one individual pressure type for highs), two horns, built-in crossover filter, and a steel "U" type mounting bracket that is fully adjustable. **Power Input:** 15 watts (continuous duty). **Sound Level:** 118 db (Measured at 4', 800-1300 cps with rated power). **Dispersion:** 120° average. **Frequency Response:** 140-15,000 cps. Crossover at 1000 cps. **Impedance:** 8 ohms. **Dimensions:** Bell opening, 15"; overall depth, 12". Weight: Net, 11½ lbs.; shipping, 14 lbs.

Atlas Model WT-6 "Coax-Projector"—Net Each **$34.50**

MODEL DU-12
"DECOR-PROJECTOR"



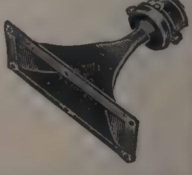
Has the high intelligibility, directivity and efficiency of a driver-type projector. Horn-type construction offers directional sound confined to the required areas. "Positive-lock" bracket makes speaker easily adjustable; steel mounting adapter strap permits mounting on wall or ceiling surfaces as well as on a standard 4" electrical outlet box. Canopy can mount line transformer. **Frequency Response:** 400-9,000 cps. **Dispersion:** 120° average. **Impedance:** 8 ohms. **Power Input:** 5 watts continuous. **Dimensions:** Bell opening, 7"; Air column, 14"; overall length, 14". Weight, 4 lbs.

Atlas Model DU-12 "Decor-Projector"—Net Each. **$21.00**

Atlas Model T-5 Matching Transformer—For use with DU-12 Equipped with mounting bracket. **Primary:** 1K, 2K, 4K, 8K and 16K ohms. **Secondary:** 8 ohms.

Atlas Model T-5 Matching Transformer—Net Each. **$2.40**

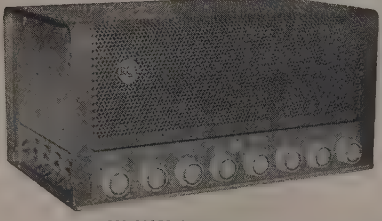
MODEL HR-3
"SUPER TWEETER"

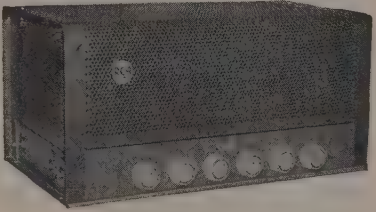


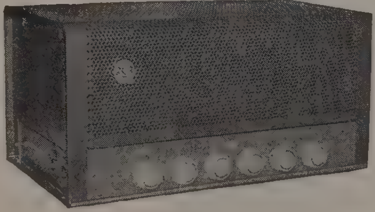
Versatile high frequency reproducer that provides top response with greatest smoothness, at a wide angle of distribution. Distortion-free. All parts of the acoustic path are constructed of precision-controlled die castings. Each diaphragm is checked for weight and compliance to assure functional uniformity. **Power Input:** 35 watts. **Frequency Response:** 2,000 to 17,500 cps. **Impedance:** From 12 to 16 ohms. **Dimensions:** 7¼" w. x 3" h., in front; 6½" d., overall; will mount in 6" x 2" cabinet opening. Shipping Wt., 3 lbs.

Atlas Model HR-3 "Super-Tweeter"—Net Each. **$16.50**

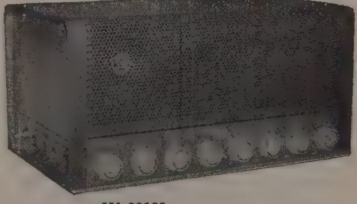
PA Amplifiers, Transformers


MI-12158-A


MI-12156-A


MI-38104

MI-12399


MI-38103

YPE MI-12158-A 70-WATT SOUND AMPLIFIER

dern styling, simple operation and top performance character- this new amplifier. Offers the highest quality, dependable roduction from microphones, turntables or tape pickups; spe- ly suited for diversified sound applications such as music, ing and speech reproduction from amusement parks, audi- iums, ballrooms, churches, industrial plants, hotels, restaurants, res, etc. **Power Output:** 70 watts. **Frequency Response:** 20 to 000 cps. **Distortion:** 2% 400 and 100 cps at 70 watts; 5% 10,000 cps at 70 watts. **Signal to Noise Ratio:** Mike, 52 db; no, 68 db. **Inputs:** Four jacks for high quality mikes and no high impedance inputs on the end of chassis. **Outputs:** xiliary AC outlet and screw terminal audio outputs are located rear of chassis. **Output Impedances:** 4, 8, 16, 72 ohms (70v. anced or unbalanced tap). **Controls:** 4 Gain or Level for 4 indi- ual mikes; 1 phono or auxiliary; Bass; Treble; Master Volume/ -Off; Switch to change mike No. 4 to magnetic pickup. Mike l phono inputs mix ahead of the tone controls. Octal socket vision for remote control of mikes. **Tubes:** 2-6146, 2-OC3, C4, 1-6AU6, 1-12AU7, 1-12AT7, 1-5R4GY RCA types and 2AD7 or RCA 7025. **Power Input:** 225 watts at full load, 140 at ng; 100-135 volts at 50-60 cps with 3 amp. fuse. Dark blue vinyl stic finished perforated steel cover. **Size:** 17″ w. x 11″ d. x 8¼″ h. ight, 45 lbs.

A Type MI-12158-A Amplifier—List Price....... $418.75

YPE MI-12159-A 70-WATT SOUND AMPLIFIER

ilar in appearance to Type MI-12158-A, with the same char- eristics except that it is built with 2 mike inputs at the end of ssis (only 2 front Gain Levels); also the signal to noise ratio for ono input is 65 db. Uses only 1-12AD7 or RCA 7025 and does use the 1-6C4 stage.

A Type MI-12159-A Amplifier—List Price....... $368.75

YPE MI-12156-A 15-WATT SOUND AMPLIFIER

dern styling, simple operation and top performance character- this new 15 watt amplifier. It offers high quality, dependable nd reproduction from mikes, turntables or tape pickups and is ecially suited for diversified sound applications such as music, ging and speech reproduction. Typical applications include: usement parks, auditoriums, ballrooms, churches, garages, spitals, hotels, lecture rooms, industrial plants, parking lots, taurants, schools, stores, etc. Circuits are high gain, low-noise e for top performance. Efficient design keeps power consump- n at a minimum, yet provides a constant voltage output. Com- te control flexibility for high versatility. Inputs are high im- lance, adaptable for low impedance using plug-in transformers listed below. **Frequency Response:** 20-20,000 cps ±2 db. **tput Impedances:** 4, 8, 16, and 333 ohms (70 volt balanced or balanced tap). **Inputs:** Two mike (Cannon XL-3-11); 1 phono; ridging receptacle, phono. **Signal-to-Noise Ratio:** 55 db, mike; db, phono. **Controls:** Power On-Off; 2 individual Mike Gain; hono Gain; Bass Tone; Treble Tone. (Mike and Phono inputs mixed ahead of tone controls.) Octal socket provided for remote ntrol. **Tubes:** 2-6L6G, 1-5Y3GT, 1-7025, 1-6AU6, 1-6SL7GT. **wer Required:** 130 watts, 117 v. AC, 60 cycles. **Size:** 17″ w. 1″ d. x 8¼″ h. Weight, 30½ lbs. U/L Approved.

A Type MI-12156-A Amplifier—List Price....... $163.75

A Type MI-12156-A Low Impedance—Complete h two MI-12399 transformers. List Price........ $213.75

TYPE MI-38104 35-WATT AMPLIFIER

sentially the same fine amplifier as the MI-12156-A above, but reased in power to provide 35 watts normal output at less than distortion. Same handsome. compact design for high versa- ity. Volume controls are provided for each of the three inputs: mike and 1 phono, all high impedance. (For low impedance pro- ion is made for using plug-in transformers as listed below.) parate bass and treble controls for pure tonal reproduction. ovision is made for parallel connection of 2 similar amplifiers to uble the number of mixing inputs and power outputs; also usable an auxiliary input or output. Specifications are the same as I-12156-A above, except output is 35 watts; output impedances 4, 8, 16, 17.8 (25 v. balanced or unbalanced tap) and 167 (70 v. lanced or unbalanced tap) ohms; employs 1-5U4GB in place of 3GT and 2-7027 in place of 6L6G. Power, 175 watts, 117 v. C, 60 cps. **Size:** 17″ w. x 11″ d. x 8¼″ h. Weight, 31½ lbs. U/L proved.

A Type MI-38104 Amplifier—List Price......... $191.25

A Type MI-38104 Low Impedance—Complete th two MI-12399 transformers. List Price........ $241.25

TYPE MI-38103 35-WATT AMPLIFIER

specially designed for constant performance and reliability, this -watt amplifier is exceptionally suited for paging, speech repro- action and music. Improved circuit design boosts amplifier's ficiency and reliability. Maximum utility and flexibility is at- ined by providing four microphone and one phonograph inputs, ch with its own volume control. Separate bass and treble con- ols provide maximum tonal quality. Mike and phono jacks are cated on the end of the chassis for easy accessability. Auxiliary C outlet and screw terminals for audio output connections are cated on the rear end of the chassis. An additional pin jack con- ection to the phase inverter input permits paralleling two similar nplifiers to double the number of mixing inputs and power out- its; also useful as an auxiliary input or output. Amplifier is de- gned for either high or low impedance inputs—for low impedance, ug-in transformers as listed on this page may be used. **Frequency esponse:** 20-20,000 cps ±2 db. **Power Output:** 35 watts at less an 2% distortion at 400 cps; less than 5% distortion 100-10,000 cps. **Output Impedances:** 4, 8, 16, 17.8 (25 v. tap) and 167 (70 v. tap) ohms. **Signal-to-Noise Ratio:** 52 db, mike; 62 db, phono. **Controls:** 4 mike and 1 phono gain; individual bass and treble. **Tubes:** 2-7025, 1-6AU6, 1-6C4, 1-6SL7GT, 1-5U4GB, 2-7027. **Power Required:** 175 watts, 117 v. AC, 60 cps. **Size:** 17″ w. x 11″ d. x 18¼″ h. Weight, 32½ lbs. U/L Approved.

RCA Type MI-38103 Amplifier—List Price......... $270.63

RCA Type MI-38103 Low Impedance—Complete with four MI-12399 transformers. List Price........ $370.63

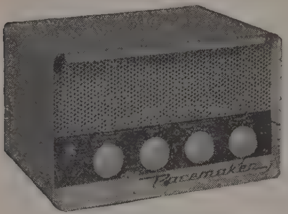
LOW IMPEDANCE INPUT TRANSFORMERS

Designed for use with the amplifiers listed above, to convert inputs to low impedance. **Type MI-12399** couples a balanced 250 ohm low-level source to a single grid; **Type MI-12398,** a balanced 50 ohm source. Secondaries are 50,000 ohm unbalanced. Double shielded construction reduces hum, amounting to 10 db or more at flux densities from 2 to 20 gauss. Mounts easily to chassis by means of a nine pin plug-in socket. Distortion is less than 3% at rated maximum primary voltages: 1.5 volts rms at 100 cycles; 0.25 volt at 50 cycles. Response is within 2 db of 1000 cycle value, 50-10,000 cps, terminated in 500,000 ohms; within 0.5 db, terminated in 50,000 ohms. **Size:** 1⅛″ diameter, 2¹¹⁄₁₆″ high. Weight, 4 oz.

RCA Type MI-12398 Transformer—50/500,000 ohms. List Price.................................... $25.00

RCA Type MI-12399 Transformer—250/500,000 ohms. List Price.................................... $25.00

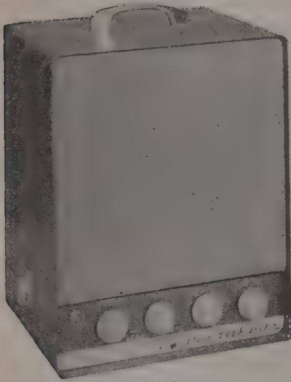
Bell Pacemaker P. A. Equipment



PM-10

MODEL PM-10 10-WATT AMPLIFIER

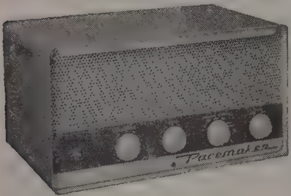
This amplifier is the answer to almost every need for modest power sound amplification. Specifically designed for Public Address use, it features two speaker outlets, an indirect panel light, and an "Acoustic" tone control.
Power Output: 10 watts; 18 watt peak. **Frequency Response:** 30-15,000 cps, ±2 db. **Gain:** Microphone, 123 db; phono, 88 db. **Hum Level:** 60 db below the rated output. **Input Impedance:** Microphone, 5 megohm; Phono, 1 megohm. **Output Impedance:** 4, 8, 16 ohms through two 5-prong sockets. **Four Controls:** Microphone, Phono, Power On/Off, "Acoustic" (5 positions—hi-cut, bass-boost, bass and hi-boost, flat, hi-boost). **Tubes:** 1-6AV6, 1-12AX7, 1-6L6GB, 1-5Y3GT. **Two Inputs:** One microphone and one phono. Operates on 117 v. AC, drawing 30 watts. Thunder Gray metal cabinet with Blue and Ivory trim; 9″ deep, 13¾″ wide, 7⅛″ high. Shipping Weight 13 lbs.
Bell Pacemaker Model PM-10 Amplifier—Net Each.......................... **$38.40**



PM-10-S

MODEL PM-10-S COMPLETE P.A. SYSTEM

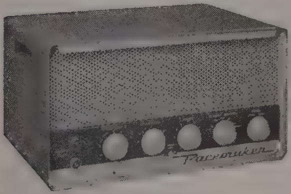
This compact, sturdy, truly portable system offers ease of handling and operation that is unsurpassed. The top section, containing the speaker and extension cables, is attached to the PM-10 chassis by two quick-release, spring-loaded clips. This permits instant removal of speaker enclosure for remote use. All specifications similar to Model PM-10 except: Speaker—10″, 4 ohm heavy duty, mounted in removable enclosure; overall size, 9″ deep, 13¾″ wide, 16″ high. Shipping Weight 20 lbs. Furnished complete with 25-foot cable.
Bell Pacemaker Model PM-10-S P. A. System—
Net Each.. **$57.00**



PM-20

MODEL PM-20 20-WATT AMPLIFIER

This new design has features and power to cover all sound requirements of medium-high power demand. Top is easily removable to accommodate a three-speed matching phono, Model PM-3-PT.
Power Output: 20 watts; 28 watt peak. **Frequency Response:** 30-15,000 cps, ±2 db. **Gain:** Microphone, 123 db; phono, 88 db. **Hum Level:** 67 db below rated output. **Input Impedance:** Microphone, 5 megohm; phono, 1 megohm. **Output Impedance:** 4, 8, 16 ohms and 70 volts, through two 5-prong sockets. **Four Controls:** Microphone, Phono, Power On/Off, "Acoustic" (5 positions—hi-cut, bass-boost, bass and hi-boost, flat, hi-boost). **Tubes:** 2-6AV6, 1-12AX7, 2-6V6GT, 1-6AX5GT. Operates on 117 v. AC, drawing 85 watts. Thunder Gray metal cabinet with Blue and Ivory trim; 10⅝″ deep, 15¼″ wide, 8⅛″ high. Shipping Weight 18 lbs.
Bell Pacemaker Model PM-20 Amplifier—Net Each.......................... **$52.50**



PM-33

MODEL PM-33 33-WATT AMPLIFIER

High power amplifier with enough output for the majority of all P.A. requirements. Assures efficient sound, even at peak output. Top is easily removable to accommodate Model PM-3-PT three-speed phono top. Features two microphone inputs, an indirect panel light, a hum control, a 70-volt tap, and 48 watts peak output.
Power Output: 33 watts; 48 watts peak. **Frequency Response:** 30-15,000 cps, ±2 db. **Gain:** Microphone, 123 db; phono, 88 db. **Hum Level:** 67 db below rated output. **Input Impedance:** Microphone, 5 megohm; phono, 1 megohm. **Output Impedance:** 4, 8, 16 ohms and 70 volts, through two 5-prong sockets. **Three Inputs.** Two microphone and one phono. **Five Controls:** Microphone (2), Phono, Power On/Off, "Acoustic" (5 positions—hi-cut, bass-boost, bass and hi-boost, flat, hi-boost). **Tubes:** 1-6SC7, 1-6AV6, 1-12AX7, 2-6L6GB, 1-5U4GB. Operates on 117 v. AC, drawing 120 watts. Thunder Gray metal cabinet with Blue and Ivory trim; 10⅝″ deep, 15¼″ wide, 8⅛″ high. Shipping Weight 22 lbs.
Bell Pacemaker Model PM-33 Amplifier—Net Each.......................... **$66.00**

PM-26-M

MODEL PM-26-M 20-WATT MOBILE AMPLIFIERS

Designed for small space use, these mobile amplifiers provide clean, smooth amplification. They all feature a shock-mounted vibrator, a ceramic cartridge, and a standby switch and socket.
Power Output: 20 watts; 28 watt peak. **Frequency Response:** 30-15,000 cps, ±2 db. **Gain:** Microphone, 123 db; phono, 88 db. **Hum Level:** 67 db below rated output. **Input Impedance:** Microphone, 5 megohm; phono, 1 megohm. **Output Impedance:** 4, 8, 16 ohms and 70 volts through two 5-prong sockets. **Three Inputs:** One microphone, one phono, and one standby. **Five Controls:** Microphone, Phono, Power On/Off, Standby Phono Switch, "Acoustic" (5 positions—hi-cut, bass-boost, bass and hi-boost, flat, hi-boost). **Tubes:** 2-6AV6, (Model PM-12M is 2-12AV6), 1-12AX7, 2-6V6GT, 1-6AX5GT, Heavy duty vibrator with long-life, double set contacts. Thunder Gray metal cabinet with Blue and Ivory trim; 10⅝″ deep, 15¼″ wide, 10⅛″ high. Shipping Weight 26 lbs.

Bell Pacemaker Model PM-26-M3 Amplifier—Three-speed phono top. Power: 100 watts at 117 v. AC; 11 amps. at 6 v. DC. Net Each.......... **$102.00**

Bell Pacemaker Model PM-212-M3 Amplifier—Three-speed phono top. Power; 100 watts at 117 v. AC; 5.6 amps. at 12 v. DC. Net Each......... **$102.00**

ACCESSORIES FOR PACEMAKER SYSTEMS

Bell Model PM-3-PT Phono Top—Three-speed record player for converting Models PM-20 and PM-33 amplifiers. Complete with ceramic cartridge, dual stylus and motor switch. Shipping Weight 10 lbs. Net Each.................................. **$21.00**
Bell Model PM-CC-12 System Carrying Case—For all Pacemaker amplifiers. Contains two 12″ speakers, each with 25′ cable. Gray linen finish plasticized fabric. 13¼″ deep, 18″ wide, 22¾″ high. Shipping Weight, 27 lbs. Net Each.................. **$48.00**
Bell Model JT-30 Crystal Microphone—High impedance. For general use. Handle, base and 15′ cable. Net Each.. **$10.17**
Bell Model GDN-HZ Dynamic Microphone—High impedance. Grip-talk stand, and 8′ cable. Net Each.. **$25.53**
Bell Model 630 Dynamic Microphone—High impedance; uni-directional. Switch and 18′ cable. Net Each.. **$29.70**
Bell Model 664 Microphone—Choice of impedance. Directional for close use. Switch and 18′ cable. Net Each.. **$49.50**
Bell Model 636 Dynamic Microphone—High impedance. Special no-blast head. Switch and 18′ cable. Net Each.. **$42.00**
Bell Model 615 Dynamic Microphone—Non-directional. Withstands shock, high temperatures and high humidity. 5′ cable. Net Each........................... **$15.00**
Bell Model 915 Microphone—Crystal version of Model 615. Net Each....... **7.50**
Bell Model DY-12 Dynamic Microphone—Multi-impedance; uni-directional. For general use. 15′ cable. Net·Each... **$47.70**

PLEASE WRITE FOR COMPLETE SPECIFICATIONS ON ABOVE MICROPHONES AND FOR PRICES AND SPECIFICATIONS ON BELL P.A. SYSTEM SPEAKERS.

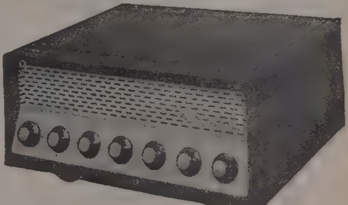
E13N-58A

BELL SOUND SYSTEMS

"5600" P. A. Systems

MODEL 5650 50-WATT AMPLIFIER

- FOUR HIGH IMPEDANCE MIKE INPUTS
- SPECIAL TAPE INPUT
- ILLUMINATED CONTROL PANEL
- BUILT-IN PHONO PREAMP
- LOCKING CONNECTIONS ON MIKE INPUTS
- 6550 POWER TUBES



tures: Four high impedance microphone inputs, readily converted to low edance by use of Model 2274 accessory; special tape input; unusually low distion; illuminated control panel; low power consumption; new 6550 tubes; special essories. Additional features include a built-in phono preamplifier with proper edance match for ceramic or crystal cartridge; locking connections on micro-ne inputs; all output impedances available on screw terminal strip on rear panel. dule type microphone preamplifiers, using new type 5879 low noise, low micro-nic input tube, are supplied.

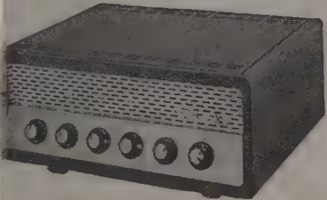
wer Output: 50 watts at less than 3% distortion; 90 watt peak. **Frequency sponse:** 30-20,000 cps, ±2 db. **Tone Controls:** Bass—14 db cut at 100 cps; 16 db st at 100 cps. Treble—21 db cut at 10 kc; 15 db boost at 10 kc. **Gain:** Micro-ne, 125 db; phono, 90 db. **Hum Level:** 60 db below rated output. **Six Inputs:** ır microphone, one phono and one external tape. **Input Impedance:** Micro-ne, 2.2 megohm; (50/200 ohms with accessory transformer); phono, 1.7 meg-n; tape, 1.7 megohm. **Output Impedance:** 4, 8, 16 and 500 ohms and 70 volt stant voltage tap. Available through two 5-prong speaker output sockets. **en Controls:** Four microphone volume; one phono volume; one bass; one treble h AC power switch (Model 5650R has standby relay and provisions for a remote tch). **Tubes:** 4-5879, 2-12AX7, 1-6SN7GTB, 2-6550, 1-5Y3GT, U4GB. Operates on 117 v. AC, drawing 210 watts. Sorral wn case with Ivory grill, gold colored panel and trim. **Size:** 13″ p, 17″ wide, 9″ high. Shipping Weight, 40 lbs.

l Model 5650 Amplifier—Net Each............ $171.00

Bell Model 5650R Amplifier—With built-in standby relay for economical operation and extended life. Net Each.................................... $186.00

MODEL 5630 30-WATT AMPLIFIER

- THREE MIKE INPUTS AND CONTROLS
- ILLUMINATED CONTROL PANEL
- BUILT-IN PHONO PREAMPLIFIER
- SPECIAL TAPE INPUT
- ALL FEATURES OF 5650



This remarkable amplifier delivers 30 watts at less than 5% distortion with a peak of 46 watts. Features three microphone volume controls, a phono volume control and separate bass and treble tone controls.

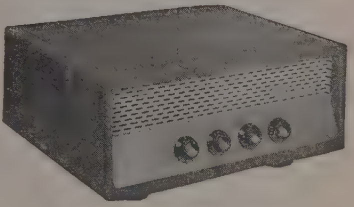
SPECIFICATIONS

Frequency Response: 30-20,000 cps, ±2 db. **Tone Controls:** Bass—12 db cut at 100 cps; 16 db boost at 100 cps; Treble—21 db cut at 10 kc; 12 db boost at 10 kc. **Gain:** Microphone, 120 db; phono, 88 db. **Hum Level:** 60 db below rated output. **Five Inputs:** Three microphone, one phono and one tape. **Input Impedance:** Microphone, 2.2 megohm (50/200 ohms with accessory transformer); phono, 1.7 megohm; tape, 1.7 megohm. **Output Impedance:** 4, 8, 16 and 500 ohms and 70 volt constant voltage tap through two 5-prong sockets. **Six Controls:** Three microphone volume; one phono volume; one bass; one treble with AC switch. **Tubes:** 3-5879, 2-12AX7, 2-6L6GB, 1-5U4GB. Operates on 117 v. AC, drawing 118 watts. Sorral Brown case with Ivory grill, gold colored panel and trim. **Size:** 13″ deep, 17″ wide, 9″ high. Shipping Weight, 32 lbs.

Bell Model 5630 Amplifier—Net Each............................ $95.97

MODEL 5615 15-WATT AMPLIFIER

- TWO MIKE INPUTS AND CONTROLS
- ILLUMINATED CONTROL PANEL
- BUILT-IN PHONO



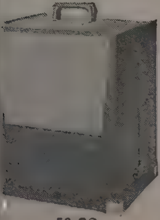
livers 15 watts at less than 3% distortion; peak wattage—25 watts. Features h gain, low hum level, two microphone volume controls, a phono volume control, d a tone control.

SPECIFICATIONS

equency Response: 30-20,000 cps, ±2 db. **Tone Control:** Treble—21 db cut at kc; 10 db boost at 10 kc. **Gain:** Microphone, 120 db; phono, 88 db. **Hum Level:** db below rated output. **Four Inputs:** Two microphone, one phono and one tape. **put Impedance:** Microphone, 2.2 megohm (50/200 ohms with accessory trans-mer); phono, 1.7 megohm; tape, 1.7 megohm. **Output Impedance:** 4, 8, 16 and 0 ohms and 70 volt constant voltage tap through two 5-prong sockets. **Tubes:** 879, 2-12AX7, 2-6V6GT, 1-5T3GT. Operates on 117 v. AC, drawing 85 watts. se has Sorral Brown finish, Ivory grill, gold-colored panel and trim. **Size:** 13″ p, 17″ wide, 9″ high. Shipping Weight, 28 lbs.

l Model 5615 Amplifier—Net Each.............................. $77.97

"5600 SERIES" ACCESSORIES



56-CC

MODEL 56-CC CARRYING CASE

This rugged, modern system-carrying-case will fit all three of the above 5600 Series amplifiers. The case contains two 12″ heavy-duty speakers with a 25-foot cable connected to each speaker. Each cable terminates in a 5-prong plug which fits into the 5-pin socket on the rear of the amplifier. Voice coil impedance is 8 ohms. The amplifier mounts on a removable board which slides into the bottom of the case.

Bell Model 56-CC Carrying Case—Complete with speakers, cable, mounting board and hardware for mounting any 5600 Series amplifier. Net Each.............. $60.00

Bell Model SXC-25 Cable—A 25-foot extension cable with plug and socket for use with 56-CC Case. Net Each........ **$3.00**

MODEL 563-PT PHONO TOP

A three-speed phono top designed for use on Models 5615, 5630, 5650 and 5650-R. Pickup has ceramic cartridge.

Bell Model 563-PT Phono Top—Net Each.......... $24.00

563-PT

MODEL 2274 TRANSFORMER

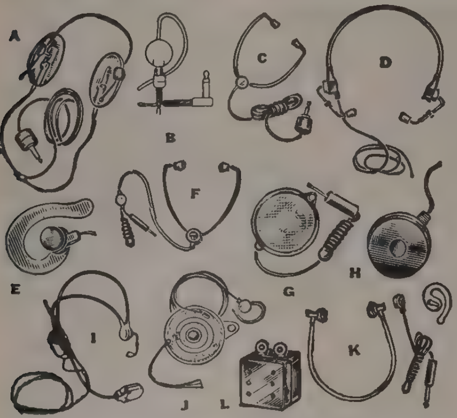
Plug-in type low impedance transformer for instant conversion of any microphone input to 50/200 ohms. For use with any 5600 Series amplifier

Bell Model 2274—Net Each.... $12.00

MODEL XL312

Locking type microphone cable connector for use on all "5600" units except 5686M-5682M.

TELEX® Headsets, Accessories



TELE-SET® (FIG. A)

Over-the-head style, weighs 1.6 ounces, fully adjustable. Tiny, stainless steel headband, two thin plexiglass air cushions. Receiver located in plug, sound piped thru acoustic tube to cushions. Ball and swivel joint permit perfect adjustment to ear.
Telex No. HSV-01 (128 ohms) or **HSY-01** (2000 ohms). Net Each .... **\$11^{37}**

TELETHIN® TRANSISTOR RADIO EARSETS

Net Each (carton of four), all items listed below....... **$15.60**

No.	For Transistor Radio Models
ETR-92*	Admiral, Dewald, Hoffman, Motorola, Philco, RCA, Regency, Roland, Trav-ler, Western Auto, Zenith
ETR-93*	Emerson, GE710, GE720, GE725, Philco, Westingh'se
ETR-94*	GE675, GE715
ETR-95*	Bulova 900B, Magnavox, Sentinel, Sonora, Sparton, Packard-Bell
ETR-90	Assortment, one each of above
ETY-92†	RCA Model T-1
ETV-92‡	Arvin 8576 and 9577P

*15-ohm. †2,000-ohm. ‡128-ohm.

DYNASET® (FIG. C)

Dynamic under-the-chin headphone covers speech and music and is excellent for telecasting and radio monitoring. Anodized aluminum tone arms. Sound conducted thru long life flexible tubing. Weighs 1.25 ounces. Sensitivity 105 db above .000204 dynes/cm^{2} for one milliwatt power input. Impedance 6 ohms.
Telex No. HUP-01 Dynaset—Net Each.................. **\$8^{85}**
Telex No. AMT-2 Eartips—Net Each........................**9c**

TWINSET® (FIG. D)

Lightest (1.6 ounces) twin magnetic-receiver headset ever made. Has CAA approval. Plastic ear tips adjustable to fit ear opening snugly. Single cord. Rugged nickel and tenite construction, may be coiled up and stuffed into pocket. Fully adjustable to any head. Sensitivity 101 db above .000204 dynes/cm^{2} for 10 microwatts input. With 5 ft. cord, two spare tips, phone plug.
Telex No. HTL-2 64 ohms impedance. Net Each..... **\$12^{60}**
Telex No. HTX-2—1000 ohms, for Pilot use (CAATC 3R2-1). Net Each.......................................**$12.60**
Unit Only. **No. HTL-01** (64 ohms); **HTX-01** (1000 ohms). Net Each.......................................**$10.50**
Telex No. ATT-1—Twinset eartips. Net Each...............**9c**

PLASTIC EARSET® (FIG. E)

A high fidelity earphone that slips onto the ear. Weighs only ½ ounce. Uses sealed, rust-proof receiver. With 5′ cord, standard phone plug. Comfortable listening at .3 mw.
Telex No. EPV-2 (128 ohms) or **EPX-2** (1000 ohms)—Net. **\$5^{40}**
Unit Only, **No. EPV-01** (128 ohms) or **EPX-01** (1000 ohms)—Net Each.......................................**$3.45**
Receiver Only, **No. RTV-04** (128 ohms); **RTX-04** (1000 ohms)—Net Each.......................................**$3.36**
Telex No. AEF-1—Plastic earframe only. Net Each........**48c**

METAL MONOSET® (FIG. F)

Improved, lightweight, under-the-chin set for dependable, superior performance. Signals are direct to the ear, blocking out background noise, Standard cord or with built-in volume control. Sensitivity, 88 db above .000204 dynes/cm^{2} for 10 μw input. Sealed magnetic receiver, removable plastic eartips. Weighs 1.2 oz. With 5 ft. cord, standard phone plug.
Telex No. HMV-2 (128 ohms); **HMY-2** (2000 ohms)—Net. **\$7^{50}**
Telex No. HMV-7 (128 ohms) or **HMY-7** (2000 ohms)— With volume control cord. Net Each................ **\$12^{75}**

DYNAMIC RADIO PILLOW SPEAKER (FIG. G)

Mellow and smooth tonal quality. Durable stainless steel housing, shock-absorbing polyethylene ring around edge. 3¾″ diam., 1⅛″ thick, weight 4 oz. without cord. Comfortable listening level with 1 mw. input to speaker. Maximum power level, ½ watt. With 5′ cord and standard phone plug.
Telex No. SDN-2—3.2 ohms impedance. Net Each....... **\$6^{12}**
Telex No. SDM-2—10,000 ohms impedance. Net Each...**$7.26**
Telex No. SDM-7—10,000 ohms impedance; with 5′ long cord with Volume Control. 25,000 ohms. Net Each...... **\$9^{42}**

RADIO PILLOW SPEAKER MODEL "R" (FIG. H)

Palm-sized, weighs only 2.6 oz., easily sterilized in alcohol. Completely shock-proof. Detachable flexible cord. Sensitivity 1 mw. for comfortable listening. Frequency response, 50-4000 cps. ⅝″ thick, 2¼″ diameter. 5′ cord and plug.
Telex No. SMV-2 (128 ohms) or **SMY-2** (2000 ohms)— Net Each.. **\$6^{75}**
Unit Only, **No. SMV-01** (128 ohms) or **SMY-01** (2000 ohms)— Net Each..**$4.65**

BOOM-MIKE HEADSETS (FIG. I)

Two-way communication headset and mike. Adjustable featherweight metal boom and tone arms. Sound conducted directly to ears with background noise blocked. **Mike Impedance:** 50 ohms carbon; 15,000 reluctance; 25 dynamic; high Z on crystal. Others available on special order. **Receiver Sensitivity:** 120 db above .0002 dyne/sq. cm/mw. **Receiver Response:** 50-5,000 cps. Weight, 3.5 oz.

*	Carbon		Reluctance		Crystal		Dynamic	
	No.	Net	No.	Net	No.	Net	No.	Net
A	BCW12	$32.40	BRW12	$35.15	BXW12	$30.80	BDW12	$48.95
B	BCW11	24.90	BRW11	27.70	BXW11	23.30	BDW11	41.45
C	BCO1	18.95	BRO1	17.35	BXO1	21.70	BDO1	39.80
D	BCW13	32.60	BRW13	35.40	BXW13	30.95	BDW13	49.15
E	BCW02	28.45	BRW02	31.25	BXW02	26.80	BDW02	45.00
F	BCW01	21.00	BRW01	23.75	BXW01	19.40	BDW01	37.55
G	BCW03	25.80	BRW03	28.55	BXW03	24.10	BDW03	42.35

***SYSTEM TYPE**

A	Headset, 2 receivers in series, 5′ cord, clips, less plug
B	Headset, 1 receiver, 5′ cord, clips, less plug
C	Headset, no receivers, mike only, 5′ cord, clips, less plug
D	TV type headset, 2 receivers, split phone
E	Headset, 2 receivers, no cord
F	Headset, 1 receiver, no cord
G	Headset, split phone, no cord

CORD UNITS AND ACCESSORIES

No.	Description	Net
CBE-54	Aircraft-type cord unit, 2 plugs (PL-55, PL-68)	$ 8.05
CBE-34	Aircraft-type cord with push-to-talk switch	16.68
CBE-14	Cord unit with separate lugs, no plug	3.90
CBE-24	Standard cord unit with single plug (PL-68)	6.65
CBE-44	Switchboard-type cord unit with std. swbrd plug	6.35
CBE-96	"Y" cord, 6-cond., for split headset -03, separate terminal lugs, no plug	6.78
ATT-2	Extra black soft foam tips for headset tone arms	.06
ATT-1	Extra white plastic tips for tone arms	.12
ABS-13	Push-to-talk sw. with 4′ cordage, mtg. bracket	8.95
CBI-24	Intercommunication cordset	12.30

TV "LISTENER" (FIG. J)

For listening to TV without disturbing others. Volume control for headset. On-off speaker switch. Four-foot cord from earset to control; 15′ from control to TV.
Telex No. LCP-90—Control and earset. Net Each....... **\$9^{75}**
Telex No. ELV-98—Extra earset, with 4′ cord. Net Each.**$4.50**

TELE-FI® HEADSET (FIG. K)

Sound reaches one ear 1 millisecond after other ear. Receiver snaps onto headset or slips in slot of plastic "Earset". Cord and plug. Weight, ½ oz., less cord.
Telex No. HFV-91 (128-ohm) or **HFX-91** (1K ohm)—Net. **\$7^{41}**

SUBMINIATURE JACK AND PLUG COMBINATION

Closed circuit combination. Overall length of straight plug, 1 13/16″ x ¼″ in diameter, can be used with all miniature cordage. Jack can be mounted on any panel up to ⅛″ thickness.
Telex No. PM-01—Miniature straight plug. Net Each..... **36c**
Telex No. JMP-01—Closed circuit panel mounted jack. Net. **24c**
Telex No. JMP-02—Open circuit panel mounted jack. Net. . **24c**
Telex No. PS-01—Two pronged, standard switchboard plug. Gray nylon housing. Net Each..................................**$2.10**

VOLUME CONTROL CORDS

Standard length 5 ft.; standard phone plug.
Telex No. VYM-2—For 2,000 ohm Plastic Monoset or Magnetic Pillow speaker. Net Each..............................**$7.35**
Telex No. VXM-2—For 1,000 ohm Twinset or 500 ohm Plastic Monoset. Net Each..............................**$7.35**
Telex No. VVM-2—For 64 ohm Twinset, 128 ohm Plastic Monoset or Magnetic Pillow speaker. Net Each..............**$7.35**
Telex No. VVT-2—For 128 ohm Metal Monoset, Earsets, Tela-Ear or Tele-Fi. Net Each..............................**$7.35**
Telex No. VXT-2—For 1,000 ohm Metal Monoset, Earsets, Tela-Ear or Tele-Fi. Net Each..............................**$7.35**
Telex No. VYT-2—For 2,000 ohm Metal Monoset, Earsets, Tela-Ear or Tele-Fi. Net Each..............................**$7.35**
Telex No. VMD-2—For 10K ohm Dynamic Pillow spkr. Net **4.26**

STANDARD CORDS

Less volume control; gray color; 5 ft. length.
No. CMM-2—For Plastic Monoset, Twinset, Magnetic Pillow speaker; standard phone plug. Net Each...............**$2.10**
No. CMM-1 —As above, with eyelets only; less plug. Net. **1.41**
No. CMM-92 CMM-2 with 90° min. phone plug. Net Ea. **1.89**
No. CMM-98—As above, but straight miniature plug. Net **2.10**
No. CMM-99—5 ft. extension cord. Fits Plastic Monoset, Twinset, Magnetic Pillow spkr. Net Each...................**$2.10**
No. CMT-2—For Metal Monoset, Tele-Fi, Tela-Ear, TV Listener, Plastic Earset and Metal Earset; std. phone plug. Net. .**$2.10**
No. CMT-1—Same as CMT-2 but with eyelets only. Net. **1.41**
No. CMT-92 Same as CMT-2 with 90° min. plug Net. . **1.89**
No. CMT-98—Same as above with straight min. plug. Net **2.10**
No. CSD-2—For Pillow speaker; std. phone plug. Net Each **2.10**

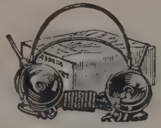
MINI-MIKE® MODEL 100 (FIG. L)

New speaker-microphone houses a dynamic speaker and Telex microphone in a case only 1″ x 1″ x ¾″. Miniature external transformer available for matching to grid circuits. Sensitivity 52 db below 1 volt/dyne/cm^{2} with matching transformer. Sensitivity of speaker, 124 db with 10 mw. power input. Impedance, 10 ohms. Weighs approximately 1⅛ oz.
Telex Model 100 "Mini-Mike" (No. MDP-01)—Net Each **\$5^{64}**
Telex No. 8918 Matching Transformer—Net Each......**$2.70**

Headsets and Hearing Aids

PROFESSIONAL

THE ORIGINAL TRIMM HEADSETS



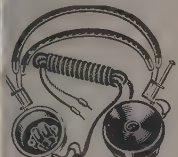
e original Trimm headset, now rther improved. Recommended for neral radio communication, elecnic testing applications, etc. Bake shell and cap. Mercerized cotton, eet braided, tinsel cord. Entirely enclosed terminals. Adjustable, nyl plastic covered, double wire headband. Standard DC mage per pair 4, 78, 2K, 3K and 4K ohms (16, 600, 12K, 20K d 28K impedance). 4K ohm DC supplied if ohmage not specified order. Single units have one-half of ohmage listed.

. 70—Double (specify ohmage). Net Each............ **$3.48**

. 72—Single (No. 695 headband, specify ohmage). Net. **$1.98**

. 76—Single, designed for inter-office communication equipment e. Has eyelet attached to side of shell for hanging onto hook en not in use. No headband. Net Each.............. **$1.98**

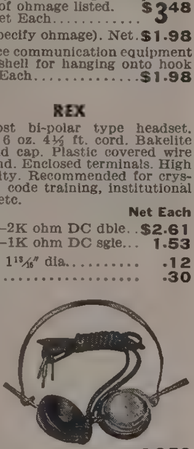
REX



Low cost bi-polar type headset. Weight 6 oz. 4½ ft. cord. Bakelite shell and cap. Plastic covered wire headband. Enclosed terminals. High sensitivity. Recommended for crystal sets, code training, institutional radios, etc.

	Net Each
No. 30—2K ohm DC dble..	**$2.61**
No. 32—1K ohm DC sgle...	**1.53**
. 613—Extra diaphragm for above 1$\frac{13}{16}$" dia.........	**.12**
. 607—Replacement bakelite caps....................	**.30**

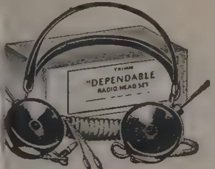
ACME



superior low-cost headset. ecommended for crystal sets, de training, etc. Black bakelite ell and cap. Chrome steel magt. Double headsets, braided 4½ et tinsel cord. Single headsets, nyl 4½ foot cord. Enclosed terinals. No. 25 and 27, adjustable, t steel headband. No. 24, adjustle, tubular vinyl plastic covered uble wire headband.

. 24—Double (2K ohms). Net Each.................	**$2.52**
. 24—Double (4K ohms). Net Each..................	**$2.61**
. 25—Double (2K ohms). Net Each.................	**2.18**
. 25—Double (4K ohms). Net Each.................	**2.34**
. 27—Single (1K ohms). Net Each.................	**1.29**
. 27—Single (2K ohms). Net Each.................	**1.41**
. 24-8—Double (4 ohm for attachment in voice coil circuits) ½' cord with phone plug. Used on radio and TV attachent kits. Net Each	**$3.00**
. 24-5—Double (4 ohms). Net Each.................	**$2.46**
. 25-5—Double (4 ohms). Net Each.................	**2.10**
. 27-5—Single (2 ohms). Net Each.................	**1.26**

DEPENDABLE



Best grade low priced headset, 5 ft. cord. Bakelite shell and cap. Plastic covered wire headband. 2,000 ohm DC resistance. Forged chrome magnets. Recommended for general radio communication service; also widely used in institutional centralized radio systems. Shipping Weight, 13 oz.

No. 65—Net........ **$2.88**

o. 67—Same as above, single phone only. 1000 ohms, 9 oz. et Each.. **$1.80**

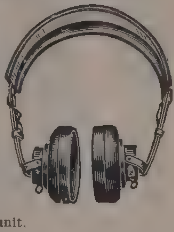
o. 65-3—Same as No. 65 but with six ft. plastic washable cord 390 for institutional systems. Net Each............... **$3.45**

TV HEADSET KITS

its below provide all you need to install phones for use on radios TV sets. It will permit children to listen to their noisy programs ithout disturbing adults. In addition the hard of hearing will find ew listening pleasure in TV when using headsets. Three kits are ffered with three types of head sets. Kits include a small outlet ox containing a remote loudspeaker On-Off switch, volume conol for headsets, two jacks for multiple listening. The outlet box connected to the set by means of a 15-ft. braided cable which is ttached to the voice coil leads within the set. Full instructions are ncluded. Outlet box has brown hammertone finish and felt covered ase.

lo. 631—Outlet Box only. Net Each..................	**$4.29**
No. 632—Kit. Outlet Box plus No. 24-8 Headset. Net....	**7.29**
lo. 633—Kit. Outlet Box plus No. 65-8 Headset. Net....	**7.65**
lo. 635—Kit. Outlet Box plus No. 160-8 Single Earphone. articularly recommended for hard of hearing. Net......	**9.06**
No. 24-8—Headset. "Acme", double, low impedance, with ½-ft. cord and phone plug. Net Each..................	**3.00**
lo. 65-8—Headset. "Dependable", double, low impednce, with 5-ft. cord with phone plug. Net Each	**3.36**
o. 160-8—Earphone. "Commercial", single, low impednec, with 6-ft. cord with phone plug. Net Each........	**4.77**

TYPE "S" HEADSET



Designed particularly for high fidelity installations, broadcast stations and other uses where true response is needed. Response is substantially flat through all essential frequencies. Shell and cap of molded plastic. Unit proper, capsule within shell. Alnico V magnet; floating diaphragm with controlled compliance provides response unaffected by temperature. Units provided with No. 656 cushion (with a sponge rubber face, solid rubber back). Other types of cushions can be provided. Headband is leather covered, double-band type, with mounting for unit providing restricted rotation to prevent cord snarl. Available in either 4000, 600 or 8 ohms impedance per headset, except binaural types: 2000, 300 and 4 ohms per unit.

Trimm Model 35 Double Headset—Two conductor off-the-shoulder type flexible neoprene cord terminated with No. 501 plug. Specify ohmage. Net Each............ **$16.80**

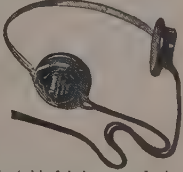
Trimm Model 35-5 Double Headset—Military type HS-33/A, but does not include extension cord. Net Each........ **$20.40**

Trimm Model 35-6 Double Headset—Military type HS-33/A plus extension cord CD-307A. Net Each.............. **$24.00**

Trimm Model 35-14 Binaural Headset—Split circuit three conductor off-the-shoulder type braided cord terminated with No. 508 plug. Net Each................................ **$19.20**

Other variations of military types using this basic headset available.

FEATHERWEIGHT



World famous "quality" headset. Weight only 4½ oz. 6 ft. moisture-proof cord. Bakelite shell and cap. Magnet of highest grade steel. Coils impregnated. Standard DC ohms (pair): 4, 152, 2K, 4K and 5K (15, 600, 9K, 18K and 24K ohms Impedance). Shipping Wt., 9 oz.

No. 100—Standard Resistance with adjustable nickel plated steel headband. Net Each..... **$6.60**

No. 104—Standard Resistance with adjustable fabric covered wire headband. Net Each.............................. **$6.60**

No. 106—24,000 ohm imped. Spec. Amateur, with adjustable nickel plated steel headband. Net Each................ **$6.60**

No. 107—24,000 ohm imped. Spec. Amateur, with adjustable fabric covered wire headband. Net Each.................. **$6.60**

No. 611—Extra diaphragm for above 1¾" dia. Net Each. . **.15**

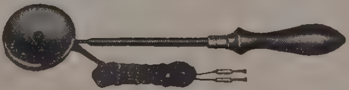
No. 600—Featherweight bakelite caps for above. Net Ea.. **.48**

EAR CUSHIONS

Sponge rubber ear cushions provide maximum ease in wearing headsets. Fit trim Featherweight, Acme, etc.

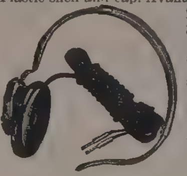
No. 654—Net.. **96c**

GROUP HEARING AID COMPONENTS



FEATHERWEIGHT EARPHONES

The most widely used earphone for group hearing aid systems in churches, theatres, mortuaries, etc. Unit weighs 1¼ oz. Cord, 6 ft. Plastic shell and cap. Available impedances: 300 ohms for low (76 ohms) impedance lines; 4500 ohms for high (1,000 ohms) impedance lines; 9,000 ohms for high impedance lines.



No. 110—Single earphone with non-adjustable headband. Net.... **$4.80**

No. 112—Single earphone with adjustable headband. Net Each.... **$4.80**

No. 120—Single earphone with extendible lorgnette handle. Net Each **$5.46**

Phone plugs (not included) required.

No. 512—Flat type plug; black or red plastic (specify). Net Each...... **52c**

Additional charge for attaching to cords of above phones............ **5c**

INDIVIDUAL VOLUME CONTROLS

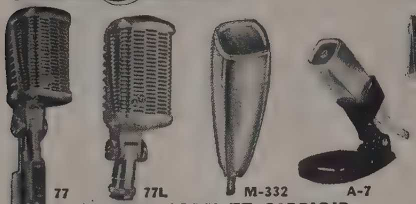
The majority of group hearing aid installations require combination volume control-outlet box type 460 or 461. Box measures 3¾" long, 2⅛" wide and 1¼" deep. All edges rounded. No. 460 has brown finish to harmonize with church woodwork. No. 461 has glossy ivory finish to improve visibility in theatres. For low impedance systems, specify 1,000 ohms, for high impedance 10,000 ohm controls. Other values of controls can be furnished. Shipping Weight, 1 lb.

No. 460—Outlet Box, brown (**specify ohmage**). Net Each.............................. **$3.30**

No. 461—Outlet Box, ivory (**specify ohmage**). Net Each.............................. **$3.30**

In either of above over 10K ohms. Net Each........... **$4.20**

ASTATIC Microphones, Accessories



NEW MODEL 77 CARDIOID

Most positive anti-feedback mike ever built. Also available in gold finish. Unidirectional design has suspended cartridge; eliminates external shock mounts. Built-in impedance selector. **Front-to-Back Pick-up:** 18 db differential. **Output:** −52 db. **Frequency Response:** 30-15,000 cps. **Impedance:** Low-Z, 30-50 ohms; medium, 150-250 ohms; high, 40,000 ohms. Shipping Weight, approximately 3 lbs., less stand.

Model 77—With on-off switch and provision for position lock-in. Net Each.. $\$49^{50}$
Model 77 Gold Finish—Net Each......................$55.50
Model 77L—Head only for mounting on G Stand. Net. 43.50
Model 77L Gold Finish—Net Each.................... 49.50
Model G77—Includes G Stand and 8′ cable. Net Each. 58.47

MODEL M-332 HI-FI CRYSTAL MIKE

New slim, high fidelity, wide response crystal mike for PA and tape recording. Supplied with lavalier cord assembly and stand adapter for ⅝″-27 mounting; can be used on stand, lavalier or in hand. **Response:** 30-15,000 cps. **Output Level:** −54 db. High input impedance, 1-5 megohms. Omnidirectional. Satin chrome cast housing with satin black grill. 8′ flexible, shielded, single conductor cable. Net Weight, 6 oz.

Model M-332—Crystal Mike. Net Each................ $\$10^{74}$
Model M-332-S—With built-in on-off switch. Net Ea...$11.94
Model A-7 Desk Stand—With adjustable swivel. Net.. 1.47

MODEL M-150 CRYSTAL RECORDER MIKE

For tape recorder. Unique modern style; extremely high output, uniform frequency range. **Output:** −44 db. **Response:** 30-10,000 cps with five megohm load resistance. **Size:** 2 3/16″ sq. x 1¼″ d. Ivory plastic body with gold rigidized metal grille. With 5′ cable. Net Weight, 3 oz.

Model M-150—Crystal Microphone. Net Each.......... $\$3^{90}$

M-150
788
888
988

MODEL 788 "METRO" DYNAMIC

Wide range and rugged construction for voice and music reproduction in PA, recording and TV, indoor or outdoor. **Response:** 50-13,000 cps. **Output:** −55 db. Black die cast alloy housing with brushed gold and "color touch" top trim. Omnidirectional. High or low impedance by simple change. 9 11/16″ l. x 1⅜″ max. dia. On-Off sw. With desk-floor stand adapter, lavalier cord and assembly, belt clip, 20′ cable. Net Weight, 8 oz.

Model 788—Dynamic Microphone. Net Each......... $\$47^{70}$

MODEL 888 "TEMPO" DYNAMIC

High fidelity and advance styling for applications in color TV, sound stage and deluxe PA systems. **Response:** 50-15,000 cps. Multi-impedance, 50-200-HZ. **Output Level:** −56 db. Die cast alloy housing in satin black with brushed chrome finish and "color touch" top trim. 9⅞″ long x 1 9/32″ max. dia. Includes case, SA-8 desk-floor stand adapter, lavalier cord and assembly with belt clip and 20′ 2-wire shielded cable. Weight, 9 oz.

Model 888—Dynamic Microphone. Net Each......... $\$66^{00}$

MODEL 988 "VOGUE" DYNAMIC

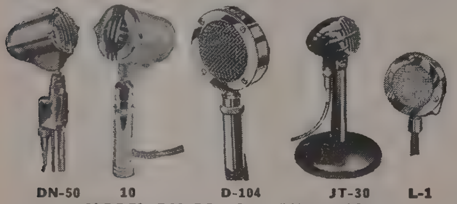
Beauty and High Fidelity for the most exacting color TV and broadcast requirements. **Response:** 40-20,000 cps. **Output Level:** −58 db. Multi-impedance selection, 50-150-250-HZ. Black die cast housing with brushed gold and "color touch" trim. 10 3/16″ long x 1 9/32″ max dia. With case, desk-floor stand adapter, lavalier cord and assembly and 20′ cable. Net Weight, 8¾ oz.

Model 988—Dynamic Microphone. Net Each......... $\$90^{00}$

MODEL A-8 "FUTURA" DESK STAND

For "Futura" Models 788, 888 and 988 microphone. Weighted, non-tipping die-cast aluminum; satin-black, non-reflective finish. Non-marring, non-slipping base bumper. Net Weight, 1 lb. 2 oz. Illustrated on models listed.

Model A-8 Desk Stand—Net Each.................... $\$4^{95}$



MODEL DN-50 "THE DYNAMIC"

General purpose. Unitary moving coil system, carefully proportioned acoustic circuit. **Response:** 50-7000 cps. **Output:** DN-50, −51 db; DN-HZ, −55 db. Semi- or non-directional. Opalescent gray and bright chrome finish. With 10′ cable.

Model DN-50—Dynamic Mike, 50 ohms imped. Net Ea. $\$20^{10}$
Model DN-HZ—Same, but Hi-Z. Net Each............$23.82
Model G Stand—With grip type on-off switch. Net.... 14.97

MODEL 10 "THE VOICE"

Ideal for SSB, AM transmitters, paging and industrial applications. High impedance. **Output:** −54 db. **Range:** 300-3,000 cps. Plug-in ⅝″-27 thread mounting with 5′ cable.

Model 10-C Ceramic—Gray chrome grille. Net Each.. $\$17^{82}$
Model 10-D Dyamic—Chrome body and grille. Net....$23.82

SERIES D-104 "PREMIER"

Balanced performance, unaffected by barometric pressure. Machined brass parts; heavy mesh grille; chrome finish. Standard ⅝″-27 thread mounting; adaptable to SC-11 lock-switch adapter or can be mounted on Model G (Grip-to-talk) stand. Metal seal crystal offers protection against moisture and dryness. Ceramic immune to excessive heat and humidity. 3″ dia., 1⅛″ deep. Weight, 14 oz. Complete with 5′ single conductor shielded cable.

Model D-104 Crystal—Output, −46 db; impedance, 1-5 megs.; response, 30-7,500 cps rising 500-4,000 cps. Net. $\$18^{60}$
Model D-104C Ceramic—Output, −51 db; all other characteristics similar to D-104. Net Each............ $\$18^{60}$
Model SC-11 Adapter—Net Each.........................$5.40
Model G Stand—With grip-type on-off switch. Net Ea..$14.97

SERIES JT-30 "SPOKESMAN"

Streamline die-cast alloy housing; gray Hammerlin finish with chrome grille and fittings; includes handle and interlocking base. Threaded for ⅝″-27 mounting, concentric cable connector. For general PA, recording and communication. 8″ high, 2 5/16″ grille dia., 5⅛″ base dia. Weight, 21 oz.

Model JT-30 Crystal—Output, −49 db; impedance, 1-5 megs.; response, 30-10,000 cps. Complete with 8′ single-conductor shielded cable. Net Each....................... $\$11^{04}$
Model JT-30-C Ceramic—Same as JT-30 except with −54 db output and 5′ cable. Net Each...........................$11.34

MODEL L-1 CRYSTAL LAPEL MIKE

LT-6
200
T-3
M-301
M-101
10M5

Tiny dual diaphragm with spring clip and 15′ of small diameter single conductor shielded cable. Machined brass housing with wire mesh front and rear grilles; black melamine finish. **Output:** −62 db. **Impedance:** 1-5 megs. **Response:** 30-10,000 cps. 1½″ dia., ¾″ deep. Weight, 7 oz.

Model L-1 Crystal Lapel Microphone—Net Each..... $\$16^{41}$

"VELVET VOICE" CRYSTAL MICROPHONES

For PA, home recording, ham, paging, radio. Use with floor or desk stand or in hand. Gold finished housing and handle; chrome grille; brown detachable base. ⅝″-27 mounting. 8″ high, 2½″ grille dia. 5⅛″ base dia. Weight, 24 oz.

Model 200—Output, −50 db; impedance, 1-5 megs.; response, 30-10,000 cps. With 8′ cable. Net Each...... $\$11^{70}$
Model 200-S—With lock-type switch in handle. Net...$12.90
Model 241-S—Same as 200-S except with rising response from 1,500 to 5,500 cps. Net Each........... $\$12^{90}$

MODEL T-3 CRYSTAL

For studios, intercom, amateur, PA, recording. **Response:** 30-10,000 cps. **Output Level:** −52 db. Semi- or non-directional. With connector, 10′ cable. All chrome finish.

Model T-3—Crystal Microphone. Net Each.......... $\$17^{58}$

NEW CABLE TYPE Z-MATCH TRANSFORMER

Compact, shielded transformer matches low impedance mike to high impedance amplifier; permits use of long cables with low loss. **Input:** 30-50 ohms, 150-250. **Output:** 40,000 ohms approx. **Frequency Response:** ±1 db, 20-20,000 cps. Furnished with Amphenol 91-852 and 75MC1F connectors; gray finish.

Model LT-6 Transformer—Net Each................. $\$10^{50}$

M-100, M-300 SERIES CRYSTAL AND CERAMIC

Response: Crystal subs. flat 30-10.000 cps; ceramic, rising 30-8000 cps. **Output Level:** M-101, −53 db; M-102, −48 db; M-301, −53 db; M-302, −48 db.

Model M-101—Crystal Microphone. 8′ cable. Net Each.. $\$5^{25}$
Model M-102—Ceramic Microphone. 5′ cable. Net Each.$5.82
Model M-301—Crystal Microphone. 8′ cable. Net Each.. 6.90
Model M-302—Ceramic Microphone. 5′ cable. Net Each. 7.50

MODEL 10M5A CARBON MICROPHONE

For mobile, ship-shore, etc. Sensitive and rugged. **Response:** 100-4500 cps. Press-to-talk DPST switch. Retracting cable 12-in. coiled extends to 5′ Protector. Gray finish.

Model 10M5A—Carbon Microphone. Net Each....... $\$17^{70}$

Turner Microphones, Stands

A

B

C

D

E

F

G

odel 210A (Fig. A)—Professional micro-ones for motion picture studio, TV, adcast and hi-fidelity recording users. hest performance, trouble-free operation. naflex diaphragm. Response, 40-20,000 . Level, 50 ohm, −86 db; 200 ohm, 0 db. 20 ft., 3-conductor, shielded cable . Lightweight metal case. t Each.......................... $75⁰⁰

odel 220A (Fig. B)—Professional type ssic lavalier mike. Designed to feature performer and not the microphone. Its at sensitivity and wide response makes an incomparable lavalier microphone. naflex diaphragm. Response, 60-20,000 . Level, 50 ohm, −90 db; 200 ohm, 4 db. Aluminum case, neutral gray -reflecting enamel. 25 ft., 3-conductor, elded cable. t Each.......................... $75⁰⁰

odel 200 Series (Fig. C)—Choice of namic, crystal or ceramic, and choice of unts; with 12′ cable. **Model 201** fur-hed with desk stand. **Model 202** fur-hed with floor stand adapter. **Model 203** nished with lavalier assembly. **Model** mike and cable only.

odel 201, 202 or 203 Dynamic—60-000 cps, −53 db. Specify hi-impedance 50/200 ohm combination. t Each.......................... $24⁶⁰

odel 200 Dynamic—Mike only. t Each..........................$21.00

odel 201, 202 or 203 Ceramic 0-10,000 cps, −60 db. Net.. $15³⁰

odel 200 Ceramic—Mike only. t Each..........................$11.70

odel 201, 202 or 203 Crystal— to 10,000 cps, −53 db. Net.. $14¹⁰

odel 200 Crystal—Mike only.$10.50

odel 58 Lavalier (Fig. D)—"Dynaflex" aphragm. Response, 60-13,000 cps. vel, −57 db. Wired for selection of high low impedance. 25-ft., 3-conductor, elded cable. 4″ long, 1″ dia. Weight, oz., less cable. t Each.......................... $34²⁰

odel 58A—Wired for 50 or 200 m impedance, only. Net Ea... $34²⁰

odel G-4—Swivel desk stand...$3.45

odel 250 (Fig. E)—One-piece die-cast mmunications type microphone with ndsome all-chrome finish. Exclusive ple switching action. Touch-to-talk, de lock on-off switch and lift switch in se of mike (lift it up, it's on; set it down, s off). For police dispatch, restaurants, wling alleys, control towers, taxi stands, . Response, 100-10,000 cps. Level, 54 db. Complete with 20-ft., 3-conductor elded cable. High impedance. t Each.......................... $27⁹⁰

odel 251—Same as Model 250 cept 150 ohms impedance. Net $27⁹⁰

odel 256—Same as Model 250 except stal interior. Response, 60-8,000 cps. tput Level, −51 db. Net Ea. $21.00

odel 57 Dynamic (Fig. F)—TV, Broad-st and PA quality. "Dynaflex" Dia-ragm. Black satin finished case. Cannon L-4 connector for high or low impedance. sponse, 50-15,000 cps. Level, −55 db. -ft., 3-conductor, shielded cable with ick disconnect plug. 8¾″ long, 1⅛″ dia. nged coupler swings in 60° arc. Stand-d ⅝″-27 thread. Weight, oz., less cable. Net Each..... $39⁰⁰

odel S57—With On-Off Slide witch. Net Each.............. $41⁴⁰

odel 57A—Wired for 50 or 200 ohm pedances, only. et Each.......................... $39⁰⁰

odel S57A—Same as 57A, plus n-Off Slide Switch. Net Each. $41⁴⁰

odel BL-6 Desk Stand. Net Ea. $4.50

odel 95D (Fig. G)—Small dynamic. ax. diam., 1⅛″; length, 8½″. Response, 0-10,000 cps; output level, 58 db below 1 volt/dyne/cm². Satin chrome finish. ⅝″-27 thread. Wire single-ended or balanced line. With 20-ft. cable. 50, 200, 500 ohm or high Z. Shpg. Wt., 1½ lbs. Net Each.......................... $22⁵⁰

Model S-95D—With on-off slide switch. Net Each..........................$24.60

Model 808 Chief (Fig. H)—Desk, hand or stand type. Wind and blast proof moisture-sealed crystal. Response, 60-8,500 cps. Level, −45 db. 3⁷⁄₁₆″ x 2⅜″ x 1¹¹⁄₁₆″. Weight, 10 oz. Die-cast alloy case, gray enamel finish. With 6-ft. attached, fabric covered cable. Net Each.......................... $6⁵¹

Model S808—With On-Off Slide Switch. Net Each.............. $7⁷¹

Model 807 (Fig. H)—Heat and humidity resistant ceramic interior. Response, 80-7,000 cps. Level, −57 db. Net Each.......................... $6⁵¹

Model S807—With On-Off Slide Switch. Net Each.............. $7⁷¹

Model 80 (Fig. I)—Tiny, graceful crystal microphone. Beautiful, and a big performer. 4⁵⁄₁₆″ long, weight 5 oz. (less cable). Essentially non-directional. Satin chrome case. Response, 80-7000 cps. Level, −54 db. 7-ft. attached cable included. Shpg. Weight, 1¼ lbs. Net Each.. $9⁵⁷

Model C-4 Stand (Illustrated)— Shpg. Weight, ¾ lb. Net Each... $3⁹⁰

Model 82-3H (Fig. J)—Model 80 with famous Turner "Third Hand". Same technical specifications as 80. 20-ft. cable. Shipping Weight, 3 lbs. Net Each.......................... $13⁶⁵

Model 22X Crystal (Fig. K)—Smooth response. Modern styling. Satin chrome finish. Full 90° tilting head. ⅝″-27 thread. Response, 60-9000 cps. Level, −52 db. 20-ft. removable cable set. Shpg. Wt., 2¼ lbs. Net Each*. $17⁷⁰

Model 22D Dynamic—Similar to Model 22X. Response, 100-9000 cps. Level, −54 db. Choice of 50, 200 ohms or high impedance. Shpg. Weight, 2½ lbs. Net Each* $21⁰⁰

Model 33X (Fig. L)—High output with smooth response over wide frequency range. Rich satin chrome finish, 90° tilting head. Response, 60-9000 cps. Level, −52 db. 20-ft. removable cable set. Shpg. Weight, 2¾ lbs. Net Each* $16⁵⁰

Model 33D—Similar to 33X. Response, 100-9000 cps. Level, −52 db. Choice of 50, 200 ohms or high impedance. 20-ft. removable cable set. Shpg. Weight, 3¼ lbs. Net Each* $19¹⁴

*Slide off-on switch available on these models, **$1.50** net extra.

Model SR-90R Carbon Mobile (Fig. M)—Highly portable with hook for attaching to wall or dash. Response, 200-4,000 cps. Level, −38 db. 80 ohms nominal DC resistance. DPST push-to-talk switch, normally open, one pole in mike circuit, one in external relay circuit—4-conductor unshielded Koiled Kord (11″ coiled, 5-ft. extended). Shpg. Wt., 1½ lbs. Net Each.......................... $15⁹⁰

Model SR-90D Dynamic—Same appearance as above. Response, 200-9,000 cps. Level, −48 db at high impedance. SPST push-to-talk, on-off switch for on-off control of external relay circuit. 200 ohms impedance furnished with 4-conductor, 2 shielded Koiled Kord. High impedance furnished with 3-conductor, one shielded Koiled Kord. Net Each.......................... $25⁵⁰

Model U9S (Fig. N)—Multi-impedance Dynamic. 50, 200, 500 ohms or high impedance through built-in switch. Rugged and dependable under all conditions of heat, cold, humidity. Rich gunmetal lustre. Response, 80-9000 cps. Level, −52 db. ⅝″-27 thread. 20-ft. balanced line removable cable set. Shpg. Weight, 3¼ lbs. Net Each. $29⁷⁰

Model 98 (Fig. O)—Low-priced, Cardioid with excellent directionality. Response, 65-11,000 cps. Level, −52 db. Impedances: 50 ohms, 200 ohms or high. 20-ft. cable supplied. Rugged coil element, plastic diaphragm. Chrome finish. Net Each.......................... $41⁷⁰

Model S-98—With on-off slide switch. Net Each.............. $44¹⁰

Model C-7 (Shown)—Shock-mount desk stand for above. Net Each.......$5.70

H

I

J

K

L

M

N

O

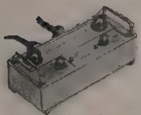
590-59A

Electro-Voice BC-TV-RECORDING MICROPHONES

667

666

665



6098

BROADCAST—TV—RECORDING DYNAMICS

CARDIOID UNIDIRECTIONAL MICROPHONES

Model 666 Super Cardioid Microphone—Totally new concept in directional microphone design uses Variable D principle. High discrimination against sounds from back hemisphere. Highly resistant to mechanical shock. Model 666 affords another octave of uniform HF response over that found in conventional broadcast cardioids. Permits close talking with no bass accentuation. Increases working distance over pressure microphones by factor of 1.7:1 due to polar pattern. Designed for operation on boom, stand or in hand. Uses only one moving element with exclusive, rugged Acoustalloy diaphragm. Response range, typical 30-16,000 cps; output −55 db. Impedance changed on internal terminal board. Wired for 150 ohms, taps at 50 and 250 ohms. Aluminum cast case finished in TV gray. Built-in Cannon UA-3 connector. Clamp-on stand mount included with ⅝″-27 thread and ½″ pipe thread adapter. 20′ cable. Size, 7½″ long, 1¾″ diameter. Net Weight, 11 oz. Net Each...**$153.00**

Model 666R Rising Response Cardioid—Similar to Model 666 above but has a frequency response which rises 4½ db from 100 cps to 2000 cps. This characteristic, combined with an excellent polar response, reduces pickup of low-frequency room reverberations, thereby reducing room "rumble" and prop noise. The Model 666R is particularly suited to boom operation because of its increased sensitivity. Output is −50½ db; other specifications are similar to Model 666. Net Each....**$153.00**

Model 667 Variable Response Cardioid—This all-purpose microphone fulfills requirements of wide-range reproduction under a great variety of acoustic conditions. The 667 combines the same excellent cardioid operations of the Model 666, listed above, with an in-line transistor preamplifier, with bass, treble and presence controls providing 40 distinct frequency response characteristics. Maximum output level: 50 ohms, −30 db; 150 ohms, −32 db; 250 ohms, −33 db. Microphone specifications, accessories, similar to Model 666 except response: 35-16,000 cps; finish brown and gold. Preamplifier noise level −123 db referred to input. Controls: Bass (4-position: +3 db, flat, −5 db, −9 db at 100 cps); Treble (5-position: +9 db, +6 db, +3 db, flat, −6 db at 10 kc); Gain (4-position); Power On-Off switch. Long-life mercury battery supplied. Steel case, brushed chrome finish. Size, 9″ l., 3⅞″ w., 3 11/32″ h. Net Wt., 3¼ lb. Supplied with 50′ cable, UA-3-11, UA-3-12 connectors; 20′ cable with UA-3-11 connector, hardwood carrying case for complete unit. Net Each..................**$360.00**

Model 665 Cardioid—Similar in design and function to the Model 666, but for less exacting applications. Uniform response 50-14,000 cps. Recessed switch provides 50 or 250 ohms. Pressure-cast zinc case. Nonreflecting gray finish. Diameter, 1⅞″, length 7 3/16″. 18′ cable. Net Weight, 1 lb. 10 oz. Net Each......................**$90.00**

Model 6098 Transistor Line Amplifier—Can be used with any E-V low-impedance microphone to increase dymanic range and lower system noise. See Model 667 above for specifications. Net Each......................................**$161.40**

OMNIDIRECTIONAL MICROPHONES

Model 655C Slim-Trim TV Dynamic—Frequency response 40-20,000 cps. Output level −55 db. Has widest range response of any microphone commercially available. Used in many laboratories as test standard. Excellent level affords high signal-to-thermal noise ratio. Can be used on stand, in hand or on boom. Easily concealed in studio props. Acoustalloy diaphragm. Pop-proof grille. Impedance 50, 150 and 250 ohms. Impedance easily changed at internal terminal board. Cannon UA-3 connector. Clamp-on stand mount included with ⅝″-27 thread and ½″ pipe thread adapter. Size, 10½″ long w/o connector, 1″ dia. 20′ cable. Net Wt. 11 oz. Net Each..**$120.00**

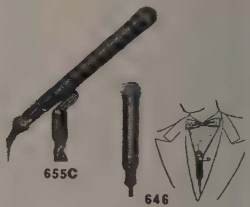
Model 654 Slim-Trim Broadcast Dynamic—Frequency Response 50-16,000 cps. Output level −55 db. Recessed selector provides 50 or 250 ohms. Built-in Cannon XL-3 connector. Acoustalloy diaphragm. ⅝″-27 thread. 18′ cable. 10″ long with stud. 1″ dia. Net Weight, 15½ oz. TV gray enamel. Net Each................**$60.00**

Model 646 Lavalier Dynamic—For chest, desk or hand use. Neck cord and support clips supplied. Response 50-10,000 cps; output level −57 db. Matches all low impedances. Omnidirectional. Acoustalloy diaphragm. Built-in connector. Gray enamel. 30′ cable, 7 1/16″ x 1″ dia. Net Weight, less cable, 7 oz. Net Each..........**$88.50**

Model 649A Miniature Lavalier—Smallest dynamic lavalier—weighs only 2 oz. without cable: 3 11/16″ long x ¾″ diameter. Ideal for programming where unobtrusive or concealed microphone placement is desirable. The 649A may be hidden in corsages, under the lapel or tie, behind a book—almost anywhere. Frequency response 60-12,000 cps. Output: −60 db. Nondirectional. Matches all low impedance. 30′ shielded cable. Aluminum case finished in TV gray. Complete with neck cord assembly and belt clip. Net Each...**$63.00**

Model 635 Broadcast Dynamic—Compact, rugged, versatile. Omnidirectional. Response, 60-13,000 cps. Output level −55 db. 50-250 ohms impedance selector. Head tilts through 90° arc. Cannon XL-3 connector. ⅝″-27 thread; size 2″ x 6¼″. Satin chrome finish. 18′ cable. Net Weight, 1 lb. Net Each..............**$49.20**

654


655C

646

649A

635

NEW "THIN-TRIM" DYNAMIC MICROPHONES

Model 652—A unique new design for an almost invisible dynamic microphone. The microphone is mounted on the end of the semirigid tube bringing the moving coil element closer to the user for full range, pop free response. The unobtrusive and attractive contour makes it ideal for use in television, broadcasting, recording lectures and other applications where the microphone should be inconspicuous. Breath and wind filter is an integral part of the microphone. Two clear plastic baffles provided to give either a 6 db or 3 db boost in the brilliance range of 6000 cps for added articulation. The microphone without the baffles gives a smooth response from 50 to 12,000 cps. The Model 652 is mounted on a ⅜″ brass rod and finished in a light tan, nonreflecting VB325 finish. Output level −60 db. Matches all low impedances. VA3-12 Cable connector, 20′ cable. Model 300 stand coupler. Length of microphone to cable connector 25″. Weight, 11 oz. Net Each..............................**$72.00**

Model 652A—Same as Model 652 except 15″ long. Net Each.............**$72.00**

Model 653—Same as Model 652A except adjustable desk stand integral part of microphone. Weight, 1 lb. 6 oz. Net Each..............................**$78.00**

652

653

All E-V microphones except crystals are eligible for FCDA purchases.

593-59A

Electro-Voice GENERAL PURPOSE MICROPHONES

UNIDIRECTIONAL LINE MICROPHONE

odel 644 Sound Spot—Another Electro-Voice revolutionary development, the ound Spot Model 644 is a combination cardioid and distributed front opening, aking it the most directional microphone ever. The Model 644 has the farthest front ckup, or better than 2.5 times the working distance of pressure types. Work close or r away without change of frequency response.

ancellation from the rear and sides exceeds 20 db giving practically complete re- ction of unwanted sound. This feature gives the most rejection of random noise in ıy microphone commercially available. Reverberation and feedback are vastly wer than any other microphone, allowing much greater leeway in loudspeaker acement.

he effective front acceptance angle is 45° each side of center giving best isolation of dividual performers. The Model 644 is 9 db better on the reduction of wind noise ıd has far less response to shock than all other microphones.

requency response is smooth from 40 to 12,000 cps, high output −52 db, dual gh and low impedance selected by changing one tap on MC4M cable connector. he case is high-pressure diecast zinc with ¾" aluminum tube. Rear diameter 2 5/16", ngth 16". Cable is 18'. Weight, 2 lbs. 9 oz. Net Each.................. **$66.00**

644

CARDIOID UNIDIRECTIONAL MICROPHONES

lodel 664 Cardioid Dynamic—Similar to Model 666 in function, but designed ecifically for PA. Cardioid pattern at all frequencies. Permits close talking without oooming" or bass accentuation. Provides better discrimination against unwanted ound. Less feedback than any cardioid PA microphone built. Blast filter minimizes ind effect. Acoustalloy diaphragm shielded from dust and magnetic particles. esponse 40-15.000 cps. Output −55 db, On-Off switch. 150-ohm and high impedance. npedance changed by moving one wire in MC4 cable connector. Pressure-cast case. hrome finish. 18' cable. Size 7 3/16" long, less stand coupler, 1⅞" diameter. Net Weight, lb. 10 oz. Net Each.. **$51.00**

lodel 664G—Gold finish. Net Each.................................. **$54.00**

636

664

OMNIDIRECTIONAL MICROPHONES

lodel 636 "Slimair" Dynamic—Exceptionally fine for PA, recording and general se. Response 60-15,000 cps, output −55 db. Pop-proof head. Wide pickup range. On- ff switch. Satin chrome finish. Tiltable head. Built-in MC-4 connector. ⅝"-27 ıread. Hi-Z or Lo-Z by changing one wire in connector. 18' cable. 10¼" long including ud, 1⅛" max. diameter. Net Each................................ **$43.50**

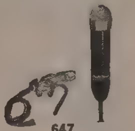
lodel 636G—Gold Finish. Net Each................................ **$46.50**

lodel 630 High Fidelity, High-Output Dynamic—Famous for quality at low cost. esponse 60-11,000 cps; output level −55 db. Unaffected by heat or humidity. coustalloy diaphragm. Tiltable head. Built-in MC-3 connector. On-Off switch. Satin hrome finish. Available in 50, 250 ohms, or Hi-Z. Size 2" x 6¼". 18' cable Net Veight, 1 lb. Net Each.. **$31.50**

lodel 647 PA Lavalier Dynamic—Small, rugged; for chest, desk or hand use. With eck cord, support clips and 18' cable. Response 60-10,000 cps; output level −57 db. mpedance Hi-Z or Lo-Z easily changed at internal terminal board. Acoustalloy iaphragm. Built-in connector. Gray enamel finish. 5" long, 1" dia. Net Weight, less able, 4 oz. Net Each.. **$49.50**

623

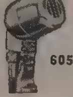
630


647

lodel 623 Slim Dynamic—Ideal for PA, recording and general use. Use on stand or n hand. Omnidirectional. Response 60-12,000 cps; output level −56 db. Hi- or Lo-Z y changing one wire in connector. Pressure cast; satin chrome finish. Tiltable head. On-Off switch. Built-in MC-4 connector. ⅝"-27 thread. 7½" x 1 5/16". 18' cable. Net Weight, 15 oz. Net Each.................................... **$34.20**

Model 611 "Mercury" Dynamic—Traditional styling, fine performance for general ound pickup. Response 50-9000 cps; output level −55 db. Nondirectional. Acoustalloy diaphragm. Tiltable head. On-Off Switch. Built-in MC-3 connector. ⅝"-27 hread. Satin chrome finish. Available in 50, 250 ohms or Hi-Z. Lo-Z balanced to grd. 3⅜" x 3⅛" x 6¼" inc. stud. 18' cable. Net Weight 1¼ lbs. Net Each...... **$27.00**

624


605

Model 624 Dynamic Lavalier—Most economical dynamic lavalier on the market. For hest or hand use. Supplied with neck cord, support clip and 18' cable. Satin chrome inish. Wire mesh head acoustically treated for wind and moisture protection. Output −56 db, response 100-7,000 cps. Hi-Z or 150 ohm, not balanced to ground. 3⅝" x 1⅞". Cable has integral strain relief. Net Weight, 10 oz. Net Each............. **$25.50**

Model 605 Durable Dynamic—For dependable, general purpose use. Response 65-8000 cps. Output level −55 db. Nondirectional, becoming directive at higher requencies. Acoustalloy diaphragm. Head at 22° fixed tilt. Built-in MC-1 connector. Satin chrome. Choice of 50, 250 ohms or Hi-Z. Low impedance not balanced to ground. 3¼" x 2½" x 2" dia. Net Weight, 12 oz. With 18' cable. Net Each........ **$19.50**

611

615

Model 615 "Century" Dynamic—Incomparable for paging, home recording, amateur, or any low-cost applications. Can be used in hand, on table, on stand, or overhead. Nondirectional. Acoustalloy diaphragm. Withstands extreme temperature, humidity, corrosion and shock. Response 80-8000 cps. Output −55 db. 50 ohms or Hi-Z. Lo-Z not balanced to ground. 5' cable. Pressure cast case, satin chrome. Rugged, lightweight. Size 3" x 2 1/16" x 1". With ⅝"-27 thread stand adapter. AC-DC insulated. Net Each.. **$15.30**

615 on 415

All E-V microphones except crystals are eligible for FCDA purchases.

593X-59A

Electro-Voice MICROPHONES

CRYSTAL AND CERAMIC MICROPHONES

Model 951 Cardioid Crystal—Uses same new Variable D principle as E-V's BC-TV cardioids to obtain uniform directivity at all frequencies, high discrimination against unwanted sound. The 951 is an excellent wide-range, all-purpose PA microphone for a great variety of acoustic conditions, and especially useful where background noise and reverberation are a problem. Response 50-11,000 cps. Output −60 db. Hi-Z. On-Off switch. Pressure-cast case, satin chrome finish. 18′ cable, MC-1 connector. 5⅜″ l. (excluding stud), 1¾″ dia. overall. Net wt., less cable, 1¼ lbs. Net..**$29.70**

Model 911 "Mercury" Crystal—Same smart design and fine performance as Model 611. Response 50-9000 cps. Output −50 db. Metal Seal Crystal. MC-1 connector Hi-Z. 18′ cable. Net Weight 1¼ lbs. Net Each...........**$19.50**

Model 926 Slim Crystal—Level and response ideal for general purpose use. Response 60-8000 cps; output level −60 db. Hi-Z. Pressure cast case, satin chrome finish. Tiltable head. ⅝″-27 thread. 6¾″ x 1 5/16″. 18′ cable with integral strain relief. Net Weight 11 oz. Net Each **$17.70**

Model 920 "Spherex" Crystal—All-direction pick-up. Response 60-7000 cps; output level −50 db. Strong wire-mesh head acoustically treated for wind and moisture protection. High capacity, moisture sealed crystal. Hi-Z. Satin chrome. ⅝″-27 thread. Diam. 2¼″. 18′ cable. Net Weight 8 oz. Net. .**$16.50**

Model 924 Lavalier Crystal—Unique crystal lavalier for chest or hand use. Supplied with neck cord, support clips and 18′ cable. Satin chrome finish. Wire mesh head acoustically treated for wind and moisture protection. Output −60 db. Response 60-8000 cps. Hi-Z. 3 5/16″ x 1 7/16″. Cable has integral strain relief. Net Weight 8 oz. Net Each...**$12.00**

Model 729 Ceramic Cardioid—The Model 729 is the lowest priced cardioid ever built. Random noise, reverberation and the possibility of feedback reduced by a factor of 67%. Front pickup range nearly double that of pressure microphones. Designed for public address, call and paging systems, amateur radio, home recorders, especially stereo, and general communications. Discriminating against sound from the rear makes the 729 excellent for amateur radio VOX operation. Tailored for single sideband. Output −55 db. Response 60 to 8,000 cps. High impedance only. May be used in any climate. Available with or without "on-off" switch. Metalustre gray front with medium gray back. Attractive desk stand and floor stand supplied. Net weight, less cable and stand, 9 oz. Net Each......................**$14.70**

Model 729S—With switch.
Net Each......................**$15.90**

Model 727 Slim Ceramic—A new approach to the design of ceramic microphones for PA, recording and general use; similar in appearance to Model 729. Withstands extremes of temperature and humidity. Response 60-8000 cps. Output −55 db. High impedance only. 5′ cable. Available with or without "on-off" switch. Metalustre gray front with medium gray back. Size 7⅞″ x 1½″ x 1¼″. Supplied with attractive desk stand and floor stand coupler. Net Weight less cable, stand, 9 oz. Net Each...**$10.80**

Model 727S—With switch.
Net Each......................**$12.00**

Model 715 "Century" Ceramic—Use in any position—in hand, on table, on stand or overhead. Ceramic element. 60-7000 cps: output −55 db. Hi-Z. 5′ cable. Non-directional. Satin chrome finish. Rugged, lightweight. 3″ x 2 3/16″ x 1″. With ⅝″-27 adapter, AC-DC insulated. 6 oz.
Net Each........................**$7.80**

Model 715S—With switch.
Net Each........................**$9.00**

Model 718 Ceramic—With attractive contemporary styling, the new 718 is designed particularly as an improved replacement for inexpensive home recording microphones. Convenient to use in hand or on flat surface. 5′ cable includes a molded-on phono plug, with adapter, to match all late model home recorders. Improved high-level (−55 db) ceramic element resists damage from temperature, humidity extremes. Response 60 to 6000 cps. 3 9/16″ x 1¾″ x 1 13/16″. Net Weight 8 oz. Net....**$7.20**

Model 712 Ceramic—Low cost ceramic microphone. Fits need of limited PA, home recording, paging and general use. Handheld. Moisture sealed ceramic. Response 70-7000 cps. High output −55 db. Hi-Z. Attractive gray Styron case. Size 3″ x 2¼″ x 1⅜″. 5′ cable. Net Weight 4 oz. Net Each........**$4.50**

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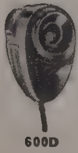
DIFFERENTIAL AND SPECIAL PURPOSE MICROPHONES

622SKK

606

648 on 448



600D

Model 622SKK Dynamic Handset—For paging, intercom and communications. Light, sturdy bakelite, 150-ohm magnetic receiver with response 200-4000 cps. Switch closes mike and relay circuit. Response 100-5000 cps, output level −55 db. Impedance 250 ohms. 5′ 5-conductor cable. Net Each.......**$46.80**

Model 625SKK Dynamic Differential Handset Microphone—Noise-cancelling microphone designed for use where background noise is at high level. Enables user to speak in a normal voice. Appearance and characteristics similar to Model 622SKK. Supplied with five-conductor, unshielded cable. DPST switch also will handle relay or other remote control in addition to turning on mike. Press button to talk. Size 9″ x 3″ x 2⅝″. Net Weight, 1¾ lbs. Net Each....**$51.00**

Model 606 Differential Dynamic—Close talking, noise cancelling. Permits noise free PA systems at boat and auto races, noisy industrial plants, etc. Accepts sounds of close origin (¼″) and rejects sounds of distant origin. Response 100 to 5,000 cps. Output at ¼″ −55 db. Acoustalloy diaphragm. Head at 22° fixed tilt. ⅝″ −27 thread. Built-in MC-1 connector. Satin Chrome. 2″ x 3¼″ x 2½″ including stud. 50, 250 or Hi-Z. Low impedance not balanced to ground. 18′ cable. Net Each..........**$31.50**

Model 600D Dynamic Mobile-Mike—Lightweight, hand-held, extra-rugged. Output −55 db. Press-to-talk switch. Acoustalloy diaphragm. 2¼″ x 2″ x 4″. 50, 250 ohms or Hi-Z. 1′ retracted coiled cord, 5′ extended. Net Weight less cable 8 oz. Net Each..............**$28.50**

Model 210KK Carbon—Similar to Model 600D but single-button carbon. Output −50 db. Press-to-talk switch. 1′ coiled cord. Net Each......**$21.00**

Model 602—A noise-cancelling dynamic microphone for use in areas of heavy background noise. It accepts sounds of close origin (¼″) and rejects sounds of a distant origin. Successful noise free public address systems are now possible at boat and stock car races, railroad yards or similar noisy locations. Output level 55 db, 200 to 4,000 cps, press to talk switch, acoustalloy diaphragm, 1″ retracted coiled cord, 5′ extended. Available in Hi-Z or balanced line, 50 or 250 ohm. Weight, less cable, 8 oz. Net Each....**$34.50**

Model 205KK Differential Carbon—Close-talking, noise-cancelling, single button carbon. Maximum intelligibility under high ambient noise. Designed for private aircraft and emergency communications. Blastproof, waterproof, shock resistant. Output at ¼″ −50 db. Black phenolic case. Press-to-talk switch. Mounting bracket. 1′ coiled cord. Size 2¼″ x 2¼″ x 4″. Net Weight less cable 8 oz. Net Each..................**$27.00**

Model 205STCKK—CAA Type approved certificate No. 1040 with coiled cord. Designed for commercial aircraft. Net Each........................**$33.90**

Model 205STCKKP—Similar to above with WE-309 plug. Net Each..**$36.75**

Model 648 Intercom Microphone—Extremely versatile paging, intercom, or PA mike. Can be mounted on desk or floor stand, boom, gooseneck, or special fixtures. Cable is concealed when used with Model 448 swivel boom. Response 50-10,000 cps. Output −58 db. Choice of 50, 150, 250-ohm impedance. Omnidirectional. Acoustalloy diaphragm. Nonreflecting gray. Less Cable. Size 6 1/16″ x 1″ (including ⅝″-27 thread adapter). Net Weight (with adapter), 8½ oz. Net Each.........................**$33.60**

All E-V microphones except crystals are eligible for FCDA purchases.

594-59A

Electro-Voice MICROPHONES AND ACCESSORIES

805

600TR

602TR

SPECIAL PURPOSE AND DIFFERENTIAL MICROPHONES

Model 805 Contact—For guitar, banjo, other stringed instruments. Hi-Z. Sealed crystal. Chrome finish. 15′ cable. Net Each........................... **$12.00**

Model 600TR Microphone—Has compact, two-stage transistor amplifier built into case. Complete circuit including transistor, transformers, and associated equipment. Spiralcord, four-wire lead, press-to-talk switch may also actuate relay to control transmitter. Same sensitivity as carbon mike without change in auxiliary equipment. Output −21 db. Amplifier power gain approximately 34 db. Size 2¼″ x 2″ x 4″. Black phenolic case with mounting bracket, 5′ cable. Net Weight less cable 13 oz. Net Each........................ **$49.50**

Model 602TR Microphone—Similar in type and appearance to Model 600TR, but designed for close-talking, noise-cancelling work. Speech is clear, crisp, distinct. May be used to replace carbon microphone with no change in auxiliary equipment. Net Weight less cable 13 oz. Net Each.................................. **$55.80**

MICROPHONE ACCESSORIES

Model 366 Suspension Shock Mount—Extremely light boom suspension shock mount. Combined weight of 366 and 666 microphone is 17 oz. Designed for use with 666 microphone. No tools required for installing mike. Pigtail cable connection with UA-3 connectors provides cable loop isolating boom shock noises. Made for any microphone with 1″ diameter. Net Each.............. **$24.00**

Model 345 Shock Mount—Dual-type external shock mount prevents reproduction of external shocks and stand vibrations. Permits tilting microphone head. ⅝″-27 thread. Easily attached or removed. Satin chrome. 1½″ x 3⅞″. Net Weight, 10 oz. Net Each....... **$9.00**

Model 346 Shock Mount—Designed specifically for use with Model 666 microphone. Similar in every feature to Model 345, but constructed for 11 oz. microphone. Net Each......... **$9.00**

Model 300 Detachable Microphone Clamp—Light weight adapter fits any cylindrical microphone with 1″ diameter. Provides positive means to mount on stand. Easily installed without tools with finger operated clamp. Rubber insert prevents slippage on mike. ½″ pipe thread adapter for ⅝″-27. Net Each.................... **$6.00**

Model 524 Wind Screen—Designed specifically for use with Model 666 microphone. Minimizes wind effect on boom operation or when used outdoors. Made of Acoustifoam rubber. Net Weight, 2 oz. Net Each............... **$4.80**

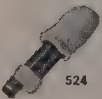
Model 335 Blast Filter—Acoustically treated, scientifically curved grille stops wind and breath blasts. Does not affect frequency response. Easily fits over head of E-V Models 630, 635, and 605 mikes. Satin chrome finish. Net Each.. **$3.30**

Model 448 Swivel Boom Mount—Designed specifically for use with Model 648 microphone. Holds mike 11⅞″ off mounting surface. 62° elbow bend. MC-2M connector. Satin chrome finish. Extends 4″ below mounting surface, 2½″ diam. mounting base. Net Weight, 1 lb. 5 oz. Net Each.............. **$14.40**

Model 502A Matching Transformer—Designed for use in series with mike line. Transformer windings have low distributed capacity and are amply shielded against inductive hum by a shield inside pressure cast case. Designed for 50, 150, 250 and 500 ohms—to Hi-Z. Broadcast fidelity response 40-20,000 cps ±1 db. MC-4 input connector. 2⅞″ x 1¹⁵⁄₁₆″ diameter. Net Each..... **$10.50**

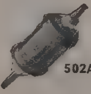
366

300


524

648 on 448

335


502A

MICROPHONE STANDS

Model 415 Reclining Desk Stand—Mounts 615, 715, 915 at 15° tilt. Satin chrome. Size 2⅝″ x 2¾″ x 1″. Net Weight, 4 oz. Net Each........ **$1.05**

Model 416 Stand—For semipermanent mounting of 646, 647 microphones. Black rubber. Size 3⅛″ diameter, 1″ high. Net Weight, 2 oz. Net Each........ **$3.00**

Model 418 Desk Stand—Use with microphones using small-type stud such as Models 611, 623, 630, 635, 636, 911, and 951. Die cast base. Gray finish.
Net Each........................ **$6.00**
Model 41[illegible]-S—With switch..... **$9.00**

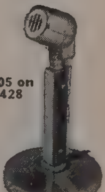
Model 419 Desk Stand—Similar to Model 418 but for use with microphones using large-type stud such as Models 654, 664 and 665.
Net Each........................ **$6.00**
Model 419-S—With switch..... **$9.00**

Model 420 Desk Stand—Heavy cast iron stand finished in TV gray. Specifically designed for use with E-V 666, 655C, 646 or microphones with 1″ diameter. Clamp attachment for mounting 1″ cylindrical mikes, without tools. Base holds mike in position when subjected to ordinary strain. Net Weight, 3 lbs. Net Each.................... **$12.00**

Model 423-A Desk Stand—Sturdy smartly styled, round die-cast base, 5⅛″ diameter. Rests firmly on rubber base buttons. Rich satin chrome. ⅝″-27 thread. Choice of 3″ or 5″ matching stem riser. Net Weight, 1 lb. Net **$3.00**

Model 428 Touch-To-Talk Stand—Fits standard ⅝″-27 thread. Lever-type switch for relay operation or microphone On-Off—closes or opens instantly or locks in "talk" position. Satin chrome; gray plastic switch lever with locking button. 7″ x 5⅛″ base diameter. Net Weight, 1¾ lbs.
SPDT. Net Each........... **$10.50**
DPDT. Net Each........... **$10.50**

Model 425 Deluxe Floor Stand—Button at top gives one-hand height control from 37″ to 66″. Locks automatically on release. Shaft can be rotated without any adjustment device. Locking-type adjustable legs permit stand to be placed flush against wall. Modern, die-cast base. Three-leg spread 17″. Net Weight, 7½ lbs. Net Each........... **$18.00**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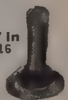
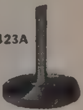
664 on 419


647 in 416

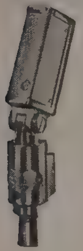
666 on 420


423A

425

All E-V microphones except crystals are eligible for FCDA purchases.

SHURE Shure Microphones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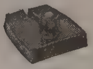
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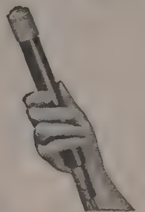
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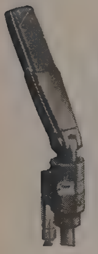
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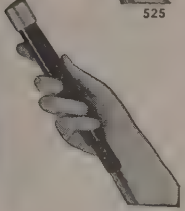
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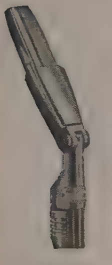
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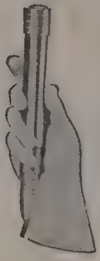
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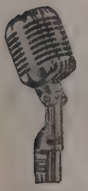
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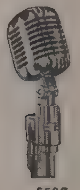
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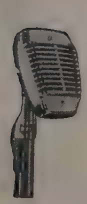
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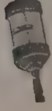

A86A

STUDIO MICROPHONES

MODEL "330" UNI-DIRECTIONAL RIBBON MICROPHONE

A truly fine and rugged microphone for discriminating users with the most exacting requirements for high-fidelity recording in the home. A small, super-cardioid microphone, recommended for finest quality indoor PA installations. Uni-directional design reduces random noise energy 73%. Patented "Uniphase" system. Horn loaded ribbon transducer for smooth response and production uniformity guaranteed to ±2½ db, 30-15,000 cps. Features multi-impedance switch, anti-"Pff" filter screen, and self-adjusting lifetime swivel. Sturdy one-piece metal case with vibration-isolation unit mounted in live rubber. Connector is Cannon XL type. **Impedance/Output Level:** Low (50 ohms) output level is 59 db below 1 mw per 10 microbar signal; medium (150 ohms), 57 db below 1 mw per 10 microbar signal; high-medium (250 ohms), 58 db below 1 mw per 10 microbar signal Furnished with 20′ two-conductor shielded cable. Case finish: Satin-chrome. Shipping Weight, 4 lbs.

Shure Model "330" Professional Uni-Ron Mike—Net Each.............. $72.00

Shure Model "333" Studio Uni-Ron Mike—Net Each....................$150.00

Shure Model "S33" Broadcast Desk Stand—Designed for use with Shure microphones Models 300, 330, 333, 525, 535, and 556S. Net Each.................. $9.00

MODEL "525" OMNI-DIRECTIONAL DYNAMIC MIKE

An exceptionally fine probe microphone of broadcast quality. It features: **Frequency Response:** 40-15,000 cps, guaranteed ±2½ db; a moving coil mounted in a highly efficient magnetic structure; "Alnico V" magnet; multi-impedance switch; high output; long life "Duracoustic" diaphragm specially designed to withstand moisture, heat, cold and physical shock. **Impedances:** 50, 150 and 250 ohms. **Output Level:** 61 db below 1 mw per 10 microbar signal. The "525" is furnished with a 20 ft., two-conductor, rubber-covered, shielded cable with Cannon XL-3-11 connector attached. Also provided are: Swivel adapter, adjustable lavalier assembly (cord and clip) and a belt clip assembly. "Baked Bronze" finish is non-reflecting; blends into the background. Body Size: 1″ diameter, 8 17/32″ long. Use Model S33 (above), as accessory desk stand.

Shure Model "525" Omni-directional Dynamic Mike—Net Each......... $120.00

MODEL "300" BI-DIRECTIONAL GRADIENT MICROPHONE

A rugged, high fidelity, multi-impedance mike widely used for TV, radio, Hi-Fi uses, and professional recording. Reduces random noise and reverberation by 66%; combining the best features of conventional velocity mikes with advanced acoustic design. Bi-directional polar pattern is effective over a wide frequency range. **Frequency Response:** ±2½ db, 40-15,000 cps guaranteed. Anti-"Pff" filter screen eliminates unwanted noise. Gradient factor permits placing the mike at a 73% greater distance from the performer than is possible with omni-directional mikes; bi-directional feature reduces all sounds at both sides of the mike but with excellent pick-up at front and rear. Features voice-music switch vibration-isolation unit mounted in live rubber, and multi-impedance switch. **Impedances/Output Level:** Low (30-50 ohms), output level 59 db below 1 mw per 10 microbar signal; medium (150-250 ohms), 60 db below 1 mw per 10 microbars and high, 57 db below 1 volt per microbar. Supplied with 20 ft., 2-conductor, rubber-covered shielded cable with Cannon XL-3-11 connector attached. Use Model S33 as accessory desk stand. Size: 1 7/16″ w. x 2 1/16″ d. x 6″ h. Shipping Weight, 3¾ lbs.

Shure Model "300" Bi-directional Gradient Mike—Net Each.............. $90.00

GENERAL PURPOSE MICROPHONES

SLENDYNE "535" AND "530" DYNAMICS

Most versatile probe mike ever developed. A moving coil dynamic mike designed for wide range reproduction of voice and music, it may be used in indoor or outdoor applications; hand carried, mounted in floor or desk stand, or hung around the neck on a lavalier cord. Rugged construction; withstands extreme temperatures and humidity. Supplied with 18 ft. shielded two-conductor cable, on-off switch adapter, and self-adjusting swivel adapter (permits 90° tilting vertical to horizontal when stand mounted). Quick release-attach from stand. **Frequency Response:** Model "535", 60 to 13,500 cps; Model "530", 50 to 15,000 cps (deluxe version supplied with Cannon XL-3-11 connector). **Impedance/Output Level:** Low (50-250 ohms), 59 db below 1 mw per 10 microbar signal; high, 58 db below 1 volt per microbar. Shpg. Wt., 2⅛ lbs.

Shure Model "535" Slendyne—Satin chrome finish. Net....... $43.50

Shure Model "530" Deluxe—Wide range; black and gold finish. Net...... **$66.00**

BI-DIRECTIONAL "315" GRADIENT

A rugged, high fidelity, multi-impedance mike recommended for fine quality general purpose uses. Cuts random noise 66%. Bi-directional polar pattern eliminates side noise, picks up sound from front and rear. **Frequency Response:** 50-12,000 cps. Provides 73% greater distance-from-mike use than omni-directional mikes. Anti-"Pff" filter. Supplied with 18 ft. 2-conductor shielded cable, and equivalent of Amphenol 91-MC3M plug. **Impedance/Output Level:** Low (30-50 ohms), 59.5 db below 1 mw per 10 microbar signal; medium (150-250 ohms), 60 db below 1 mw per 10 microbar; high, 57 db below 1 volt per microbar. Size: 6″ high, 1 7/16″ wide, 1 5/16″ deep. Shpg. Wt., 3¼ lbs.

Shure Model "315"—Net Each $53.70

MULTI-IMPEDANCE "51" DYNAMIC

The "Sonodyne", ideal for general purposes such as PA, wire and tape recording, etc.; widely used by recording artists. Pressure type with conventional semi-directional qualities, it may be used for close talking without undue low frequency emphasis. **Frequency Response:** 60-10,000 cps. Built-in receptacle and 15 ft., 2-conductor shielded cable with mike plug attached. **Impedance/Output Level:** Low (35-50 ohms), 53.0 db below 1 mw for 10 microbar signal; medium (150-250 ohms), 52.5 db below 1 mw for 10 microbar signal; high, 52.0 db below 1 volt per microbar signal. Satin chrome finish.

Shure Model "51"—Net Each. $29.70

UNI-DIRECTIONAL DYNAMIC MICROPHONES "55S", "556S"

Largest selling mikes throughout the world; famed for faithfulness of sound reproduction. Sturdy construction provides immunity of moving-coil system to abnormal weather conditions and severe mechanical shock. Both feature the world-renowned, patented "Uniphase" network system. **Impedance/Output Level:** Low (35-50 ohms), 54 db below 1 mw per 10 microbar; medium (150-250 ohms), 55 db below 1 mw per 10 microbar; high, 57 db below 1 volt per microbar.

Model "55S" is recommended for PA and theater sound systems, recording and remote broadcasting. **Frequency Response:** 50-15,000 cps. Furnished with 18 ft. high quality cable and plug assembly.

Model "556S" is constructed and tested for the requirements of broadcast and TV studios; held within close tolerances of directivity and response. **Frequency Response:** 40-15,000 cps, ±2½ db guaranteed. Has additional isolation unit set in live rubber; combined with stand connector and built-in cable connector. Comes with 20 ft. shielded 2-conductor cable with Cannon mike plug attached.

Shure Model "55S" Small Unidyne—Net Each.......... $49.80

Shure Model "556S" Small Broadcast—Net Each......... $81.00

CABLE-TYPE TRANSFORMER

A high-quality, cable-type transformer designed to make it convenient to run a long microphone line from a low impedance mike to a high impedance amplifier. Housing is a compact, sturdy, magnetically shielded case. Connection terminals are easily accessible; compression fittings crimp the mike and amplifier inputs. The A86A matches 35-50 ohm and 150-250 ohm mikes to high impedance amplifier inputs; solves the problem of high frequency loss and hum pickup where long mike cables are necessary. It provides additional versatility when used with Shure mike models 51, 55S, 556S, 300, 315, 330, 333, 525, 530, and 535; may be used in specialized applications requiring high impedance to low impedance circuit connections. **Frequency Response:** 20-20,000 cps, ±1 db. Attractive two-tone gray finish. Supplied with 2 ft. cable. 2⅞″ long x 1⅝″ dia. Shpg. Wt., 1⅞ lbs.

Shure Model A86A Cable Transformer—Net Each...... $10.50

HURE Shure Microphones

CONTROLLED MAGNETIC MICROPHONES

THE "COMMANDO"

se are rugged mikes for use indoors or loors. Models 415 and 430 can be held ie hand or set on a floor or desk stand. l for general purpose applications in e tape recording, theater-restaurant outdoor PA systems, lecturing, pag- and dispatching systems, interview- shows, etc. **Frequency Response:** 0,000 cps. **Impedances:** Two—high low. **Output Level:** High. 55 db below lt per microbar; low, 54 db below 1 mw 10 microbars.

re Model 430—Furnished with press- alk switch, normally closed; switch ing plate; 15-ft., 2-conductor, shielded e; Amphenol MC2M cable connector; swivel adapter; ⅝"-27 stand thread. act-resistant polystyrene and die-cast case; satin chrome and non-reflecting finish. Size: 6 37/64" l. x 1¾" dia.); handle, 13/16" dia. Each.................... $23.10

re Model 415—Similar in appearance Model 430. High impedance and high out level only. With 7-ft. non-detach- single conductor shielded cable; del A25 swivel adapter; ⅝"-27 stand ad. No switch. Size: 6 13/16" l. x 1¾" ; handle, 13/16" dia. Each.................... $16.50

re Model 420—Dual-Impedance, lier type. Impact-resistant polystyrene ; non-reflecting gray finish. With ft., 2-conductor, non-detachable, ided cable; detachable lavalier cord clip assembly. Size: 3 11/16" 1¾" dia. Net Each........ $18.00

THE "HERCULES"

ugged, hand-held mike designed for r speech reproduction; high output for requirements. Excellent for indoor or loor uses where extreme heat and hum- are prevalent. **Frequency Response:** -7,000 cps. **Impedance:** High. **Output el:** 52.5 db below 1 volt per microbar out. Supplied with 7 ft. shielded cable. -cast case finished in green metallic. nd adapter provided; use with S34B or A desk stands. Size: 2⅝" wide, 3¼" , 1½" thick. Wt., 1½ lbs. $10.20

re Model 510C—Net Each.

re Model 510S—With switch. Each.................... $11.40

THE "GREEN BULLET"

nune to high temperature and hu- ity. **Frequency Response:** 100-7,000 Tops for PA uses. Supplied with 7 ft. le conductor shielded cable. Use with B or S36A desk stand. **Model 520** is impedance. **Output Level:** 52.5 db w 1 volt per microbar output. **Model B** has impedance of 150-250 ohms, 51 below 1 mw per 10 microbars. Metallic n finish with plated grille. $13.50

re Models 520 or 520B—Net

THE "RANGER"

Rugged, hand-held mike that is ideal for outdoor applications and where long lines are used. Built for high speech intelligibility. Push-to-talk switch. Fits in palm of hand. Size: 3 13/16" h. x 2¾" w. x 2⅛" d.

Shure Model 505T—Incorporates a transistor amplifier, housed in the case and powered by current from the carbon mike circuit; does not require batteries or extra power supply. **Frequency Response:** 200-4,000 cps. **Output Level:** 1 db (loaded with 500 ohms) below 1 milliwatt per 100 microbars. Furnished with 5 ft. extended, 4-conductor, stranded, coiled cord. Die-cast zinc case; two-tone light gray and black baked enamel finish. Net Each.................... $29.10

Shure Model 505B—**Frequency Response:** 200-8,000 cps. **Impedance:** 150-250 ohms. **Output Level:** 50 db below 1 milliwatt per 10 microbars. With 5-ft., 4-conductor (2-conductor shielded) cable and mounting bracket for permanent placement. Die cast zinc case; blue gray wrinkle enamel finish. Net Each.................... $19.20

Shure Model 505C—**Frequency Response:** 200-8,000 cps. **Impedance:** High (recommended load, 100,000 ohms or more). **Output Level:** 50.5 db below 1 volt per microbar. With 5-ft., 3-conductor (1-conductor shielded) cable and mounting bracket. Die cast zinc case; blue gray wrinkle enamel finish. Net Each.................... $19.20

Shure Model 505K—**Frequency Response:** 200-8,000 cps. **Impedance:** High. **Output Level:** 50.5 db below 1 volt per microbar. With tinsel 5½-ft. extended, 3-conductor (1 conductor shielded) coiled cord and Amphenol MC4M cable connector. Die cast zinc case; two-tone light gray front and black baked enamel back. Net Each........ $22.50

THE "DISPATCHER"

Handles the most severe field requirements of paging, dispatching systems. Operates both mike and relay circuits dependably. **Frequency Response:** 100-8,000 cps. **Impedance:** High. **Output Level:** 52.5 db below 1 v. per microbar. Shipping Weight, 5 lbs.

Shure Model 520SL—Net Ea... $27.00

MINIATURE MICROPHONES

Designed for limited space and weight uses. Rugged; withstands mechanical shock, variable heat and humidity. **Frequency Response:** 400-4,000 cps. **Impedance:** MC11, 1,000 ohms; MC20, 1,100 ohms; MC30, 1,850 ohms. **Output Level:** MC11, −71 db; MC20, −75 db; MC30, −76 db below 1 volt per microbar. Cadmium plated finish.

Shure Model MC11—Net Each.. $7.50

Shure Model MC20—Net Each.$ 8.40

Shure Model MC30—Net Each. 12.00

CERAMIC AND CRYSTAL MICROPHONES

"SLIM-X" ALL-PURPOSE

d performing, rugged little 6-oz. mike. mount in swivel desk stand or cradle, ove quickly for walk-around uses. **Fre- ncy Response:** 60-10,000 cps. **Im- ance:** High. **Output Level:** 62 db be- 1 volt per microbar. Disconnect-type, single-conductor cable, shielded. Mois- -proof "Metal Seal" crystal for long Finished in rich satin chrome overall. e: 4½" l. x 1" dia. All models are sup- d with lavalier cord. Shpg. Wt., 1 lb.

re Model 777—Mike with dle for stand mounting. Net. $15.00

re Model 777A—Mike with A-25 vel adapter and S-38 stand. $19.80

re Model 777S—Mike with switch and dle. Net Each.............. $16.20

re Model 777SA—Mike with switch, 5 swivel adapter and S-38 stand. $21.00

THE "MONOPLEX"

only super-cardioid crystal mike le. Reduces random noise pickup 73%. isture-proof "Metal Seal" crystal for g life. Case pivots at rear for omni- ectional pickup. High impedance. **Out- Level:** 53.0 db below 1 volt per micro- output. Has 15 ft. shielded cable. Rich n chrome finish.

re Model 737A—Net Each. $27.60

THE "REX"

w-priced hand mike for "hams" or low- t PA systems. Broad, die-cast base inates need for desk stand; floor stand pter provided. **Frequency Response:** 9,000 cps. **Impedance:** High. **Output el:** 50 db below 1 volt per microbar Burgundy red metallic finish. Size: 2 11/16" wide, 3 7/32" high, 1⅛" thick. With 5′ single conductor shielded cable. $7.20

Shure Model 710A -Net Each...

Shure Model 710S—With switch. Net Each.... .... $8.40

MODEL 707A

Good quality performance at low cost; ideal for PA systems, amateur use, etc. Has typical semi-directional pickup. **Impedance:** High. **Output Level:** 50 db below 1 volt per microbar. Pearl gray case with rich satin chrome finish on front grille. Use with S34B or S36A desk stands. Diameter 2⅜". 7′ shielded cable. $11.70

Shure Model 707A—Net Each.

THE "STARLITE"

Excellent for voice and music reproduction in home recording, intercom systems and inexpensive PA systems. Can be held in the hand or used on a desk by simply releasing a built-in, retractable stand which is an integral part of the back of the mike case.

Shure Model 215—Ceramic mike. **Frequency Response:** 50-8,000 cps. **Output Level:** 56.5 db below 1 volt per microbar output. With 5-ft., fabric covered, single conductor, shielded cable. Impact-resistant polystyrene case; black front, gray back, light gray grille. Size: 3 5/16" h. x 2 3/16" w. x 1 9/16" d. Net Each ... $4.80

Shure Model 715—Crystal mike. Same as Model 215 except: **Frequency Response:** 50-10,000 cps. **Output Level:** 50 db below 1 volt per microbar. Has gray front, black back and black grille. Net Each.................... $4.80

430 Commando

420 Commando

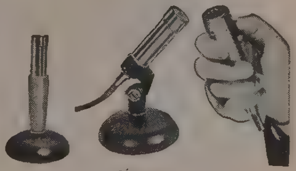
Hercules & Rex

Green Bullet & 707A

Ranger Series

520SL

MC11, MC20, MC30



Slim-X

Monoplex

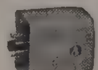
Starlite

ALTEC LANSING CORPORATION

Microphones, Accessories

21D

525A Power Supply



4665

M-30

670B

671B

680A

661

MODEL M20 "LIPSTIK" MICROPHONE SYSTEM

The ideal system for all quality recording and broadcast requirements. Its smoothness often permits higher than average sound levels in PA systems before feedback is encountered. Rugged design and freedom from magnetic pickup make it ideal in the most difficult industrial and outdoor application. Combination of quality, performance and flexibility which cannot be found in any other commercial microphone system. Microphone is Model 21D, which uses the condenser principle for smooth, wide range response; rugged enough to withstand the severest shocks. Omnidirectional pickup, free from hum, is blast proof and non-magnetic; ultra small for added convenience. Mike may be up to 400 ft. away from power supply without affecting performance. **Frequency Response:** 20-15,000 cps. **Output Impedance:** 30, 150, 600 and 10,000 ohms unbalanced; 30, 150 and 600 balanced using 4665 plug-in transformer. **Output Level:** −59 dbm/10 dynes/cm^2 at 30 ohms; −53 dbm/10 dynes/cm^2 at 150 ohms; −49 dbm/10 dynes/cm^2 at 600 ohms; −44 dbm/10 dynes/cm^2 at 10,000 ohms, unbalanced. **Capacitance:** 6 μμf. **Pickup Pattern:** Omnidirectional. **Tubes:** 1-5840 cathode follower. **Mounting:** ⅝"-27 thread on swivel attachment.

Altec Lansing Model M20 Microphone System—Includes 21D mike, 165A base, 166A stand holder and swivel; 525A power supply and 15 ft. fiberglas-covered cable. Net Each.................................... \$236^{00}

Altec Lansing Model 21D Condenser Microphone—Stainless steel finish; ⅝" dia. x ⅜" high. Weight, ¼ oz. Net Each.... **$67.00**

Altec Lansing Model 165A Microphone Base—Gray finish; 2 15/16" l. x 11/16" dia. Weight, 2½ oz. Net Each................ **$60.00**

Altec Lansing Model 166A Stand Attachment—Gray finish; 3¾" l. x ¾" dia. Net Each.............................. **$7.00**

Altec Lansing Model 525A Power Supply—Requires 15 watts, 117 v. AC, 60 cps. Gray finish; 8⅝" l. x 2⅜" w. x 7½" d. Weight, 5½ lbs. Net Each.............................. **$100.00**

Altec Lansing Model 4665 Plug-in Transformer—Provides balanced 30, 150 and 600-ohm output from 525A power supply in M20 or M30 microphone systems. Size, 2" w. x 1½" d. x 2 5/16" h. Net Each.. **$27.00**

MODEL M30 CARDIOID MICROPHONE SYSTEM

Features regularity of discrimination and smoothness of frequency response. Capable of translating the entire frequency and dynamic range without false accentuations. Condenser-quality with a directional cardioid pattern in an extremely small unit. Midrange discrimination exceeds 20 db, while extreme ends are better than 10 db. Model 29A microphone is interchangeable with the omnidirectional Model 21D microphone in existing M20 systems with only minor modifications in associated equipment. **Frequency Response:** 20-20,000 cps; −3 db at 50 cps, flat to beyond 18,000 cps. **Output Impedance:** 30, 150, 600 and 10,000 ohms unbalanced; 30, 150 and 600 ohms balanced using plug-in 4665 transformer. **Output Level:** −35 dbm/1v/10 dynes/cm^2 at 10,000 ohms; −54 dbm/10 dynes/cm^2 at 600 ohms; −58 dbm/10 dynes/cm^2 at 150 ohms; −64 dbm/10 dynes/cm^2 at 30 ohms, unbalanced. **Capacitance:** 50 μμf. **Mounting:** ⅝"-27 thread on stand attachment or shock mount.

Altec Lansing Model M30 Cardioid Microphone System—Includes 29A mike, 175A base, 166A stand attachment, 169A shock mount, 525A power supply and 15 ft. fiberglas-covered mike cable. Net Each.......................... \$334^{00}

Altec Lansing Model 29A Microphone—Stainless steel finish ¾" dia. x 25/32" seated height. Net Each............ **$150.00**

Altec Lansing Model 175A Base—Gray finish; 11/16" dia. x 2 15/16" l.; with 1-5840 tube. Net Each.................... **$65.00**

Altec Lansing Model 169A Shock Mount—Gray finish; ⅝"-27 thread. Net Each.................................... **$17.50**

Altec Lansing Model 170A Wind Screen—Clamps between mik and base; 1½" dia. x 2⅛" l. Net Each.................. **$12.00**

For Power Supply, Stand Attachment and Plug-in Transformer, See Listing for M20 System.

MODEL 670B CARDIOID MICROPHONE

A broadcast quality directional microphone at a moderate price. Small size and light weight make it perfect for many applications. A smooth, directional pattern with wide frequency response provides quality performance for studio recording, broadcasting an PA applications of all types. Selectable omnidirectional, bidirectional and cardioid patterns (by screwdriver switch), plus intermediate locations, provide literally thousands of pickup patterns permits shifting null points over a 90° angle to tune out undesirable noise. Sturdy design uses extra sensitive aluminum allo ribbon element coupled to 36" labyrinthine acoustical network. High impact plastic housing also serves as effective wind screen. Equipped with ⅝"-27 standard swivel head and locking 3-pron receptacle. **Frequency Response:** 30-16,000 cps. **Output Impedance:** Switch selected 30/50 and 150/250 ohms. **Output Level** −56 dbm/10 dynes/cm^2. **Front-to-Back Discrimination:** 15 db, average. **Hum Level:** −130 db ref. 10^{-3} gauss. **Mounting:** ⅝"-27 thread. **Size:** 2½" w. x 3⅜" d. x 6½" h. including swivel. Weight 1¼ lbs.

Altec Lansing Model 670B Cardioid Microphone—Gray finish. Net Each.......................... \$138^{00}

Altec Lansing Model 22C Floor Stand—Adjustable 35" to 64". Net Each.. **$19.00**

Altec Lansing Model 24C Desk Stand—Net Each..... **8.50**

MODEL 671B VELOCITY MICROPHONE

Compact, inexpensive velocity mike provides bidirectional picku of full broadcast quality with excellent signal-to-noise ratio an extremely low hum pickup. Two stage wind screen protects th ribbon element from abrupt air movements. High impact styren case withstands heavy abuse. **Frequency Response:** 30-16,00 cps. **Output Impedance:** 30/50 and 125/250 ohms switch selectable. **Output Level:** −54 dbm/10 dynes/cm^2. **Hum Level:** −13 dbm ref. 10^{-3} gauss. **Pickup Pattern:** Figure 8 bidirectiona **Mounting:** ⅝"-27 thread. **Size:** 2½" w. x 3⅜" d. x 4½" l Weight, 14 oz.

Altec Lansing Model 671B Microphone—Gray finish. Net Each.......................... \$114^{00}

MODEL 680A ACOUSTIC GATE MICROPHONE

The first microphone to use the "Acoustic Gate" principle—a per pheral sound entrance channel providing acoustical resistanc loading to the front of the diaphragm. Eliminates high frequenc peaks normally found in dynamic types; extends the frequenc response over an extra-wide range. Rugged, dynamic moving-co design is impervious to dust, dirt and other corrosives. Supplie with a slip-on stand mount and 20 ft. of mike cable, prewire with Cannon plug to fit connector on mike. **Frequency Response** 30-15,000 cps. **Output Impedance:** Selective 30/50 ohms, 125/25 ohms and 20,000 ohms. **Output Level:** −58 dbm/10 cynes/cm **Pickup Pattern:** Omnidirectional. **Mounting:** Slip-on adapt with swivel mount has standard ⅝"-27 thread. Lavalier cord available. **Size:** 1" dia., 1½" head dia., 7" long. Weight, 8 o

Altec Lansing Model 680A Microphone—Black head, green body. Net Each.......................... \$99^{00}

MODEL 661 DYNAMIC MICROPHONE

Economical dynamic microphone free of high frequency peak High quality performance through use of sintered bronze filt sound entrance that provides acoustic resistance loading to th front of the diaphragm; eliminates high frequency peaks, extend the frequency range; seals against all foreign particles. Recon mended for broadcast quality for hi-fi home recording, PA an similar applications. Supplied with 15 ft. two-conductor shield cable and swivel for mount on desk stand. **Frequency Response** 30-15,000 cps, guaranteed. **Output Level:** −55 dbm/10 dyne cm^2. **Mounting:** ⅝"-27 thread swivel head. **Size:** 1⅝" dia. x 5 l., including swivel. Dark green finish.

Altec Lansing Model 661A Microphone—Output impedance, 30/50 ohms. Weight, 7 oz. Net Each....... \$49^{5}

Altec Lansing Model 661B Microphone—Selectable output imped ances 30/50, 150/250 and 20,000 ohms. Wt., 9 oz. Net. **$59.4**

Altec Lansing Model 25B Desk Stand—Matching finish. N Each.. **$15.0**

RCA Broadcast Microphones

TYPE MI-12022 DYNAMIC MICROPHONE

ng coil dynamic design, for indoor or outdoor use. Semi-directional. Insulated st shock. Mounts on desk or floor stand. 90° tilting head. **Frequency Response:** 000 cps. **Output Impedance:** 250 ohms. **Output Level:** −57 dbm at 1000 cps. **Sensitivity:** −149 db. **Mounting:** 5/8"-27 fixture thread. **Size:** 2 7/16" w. x 3 3/8" d. x h. **Cable:** 20 ft. two-conductor rubber covered. Finish, satin chrome. Weight, 1 lb. less cable.

Type MI-12022 Dynamic Microphone—List Price.................... \$37^{50}

TYPE SK-46 PROGRAM VELOCITY MICROPHONE

llent performance for AM, FM, TV studio, control room announcing and general or programs. Directional characteristics reduce unwanted acoustical background , reflections and feedback. Bidirectional characteristics; 85° tilting head. **Frequency onse:** 50-10,000 cps. **Output Impedance:** 200 and 15,000 ohms. **Effective Output l:** (At 1,000 cps) Low impedance, −58 dbm; GM, −150 db; high impedance, −60 db v 1 volt. **Mounting:** Swivel 5/8"-27 fixture thread. **Size:** 1 29/64" w. x 1 3/8" d. x 5 1/8" h. e: 25-ft. shielded, two-conductor. Weight, 13 oz. less cable. Finish, TV gray and chromium plated screen.

Type SK-46 (MI-12046) Program Velocity Microphone—List Price..... \$98^{75}

TYPE BK-6B MINIATURE DYNAMIC MICROPHONE

cially designed for use in TV and radio applications. Engineered for correct speech ice. Small size and neutral color make it inconspicuous. Lanyard for hanging it conntly around neck. Semi-directional. **Frequency Response:** 80-12,000 cps. **Output dance:** 30, 150 and 250 ohms. **EIA Sensitivity:** −158 db. **Effective Output Level:** dbm at 1000 cps. **Cable:** 30 ft. flexible, shielded two-conductor; no plug. **Size:** l. x 15/16" dia. Weight, 2.3 oz., less cable. Finish, TV low-gloss gray.

Type BK-6B (MI-11017) Miniature Microphone—List Price......... \$125^{00}

TYPE BK-5A UNIAXIAL MICROPHONE

pendable, high quality ribbon instrument with improved unidirectional character-. Designed for broadcast use in AM, FM and TV stations. Smooth response. Maxisensitivity lies on the major mechanical axis, permitting uniaxial usage, simplifying and camera placement. New blast filter reduces damage from violent noises. Small nd light weight for boom usage. High shield reduces hum. Wind screen available for outdoors. Fork mounting fits RCA cushion mounts for either desk or floor stands. unit and improved shock mount available. **Frequency Response:** 50-15,000 cps. **ut Impedance:** 30, 150 or 250 ohms. **Effective Output Level:** −56 dbm at 1000 cps. e: 30 ft. shielded three-conductor; no plug. **Size:** 7" x 2 3/4" x 2 7/8" overall. Weight, 11 oz., less cable. Finish, low-gloss TV gray.

Type BK-5A (MI-11010) Uniaxial Microphone—List Price........... \$371^{25}
Type MI-11011 Wind Screen for BK-5A—List Price.....................**$28.12**
Type MI-11012 Cushion Mount for BK-5A—List Price................. **59.62**

TYPE SK-35 ANTI-NOISE VELOCITY MICROPHONE

se talking mike with true high fidelity velocity. Designed for program use where neous noise needs attenuation. Insensitivity to wind plus light weight make it ior for field use and sportscasting. Shock-proof construction; will take extreme . Excellent bidirectional characteristics. **Frequency Response:** 50-10,000 cps. **ut Impedances:** 200 and 15,000 ohms. **Effective Output Level** (at 1000 cps): Low lance, −58 dbm; GM, −150 db; high impedance, −60 db below 1 volt. **Cable:** shielded two-conductor; less plug. **Size:** 5 1/8" h. x 1 29/64" w. x 1 3/8" d. Finish, TV gray satin chrome plated screen. Weight, 13 oz., less cable.

Type SK-35 (MI-12035) Anti-Noise Velocity Microphone—List Price.. \$112^{50}

TYPE 77-DX POLYDIRECTIONAL MICROPHONE

bon microphone suited for exacting tasks, engineered for true versatility and high ty performance. Provides unidirectional, bidirectional and non-directional character- by shutter adjustment on slotted shaft. Impedance matching transformer with -position switch permits selection of best response characteristics for voice or music. se with mike stand of 1/2" pipe thread. **Frequency Response:** 50-15,000 cps. **Imped-s:** 30, 150 and 250 ohms. **Effective Output Level:** −53 dbm. **Cable:** 30 ft. shielded -conductor; no plug. **Size:** 11 1/2" h. x 3 3/4" w. x 2 1/2" d. Weight, 3 lbs., with mount-Finish, satin chrome.

Type 77-DX (MI-4045F) Polydirectional Microphone—List Price..... \$405^{00}

TYPE SK-45B AEROPRESSURE MICROPHONE

gged, lightweight dynamic mike with good response; best adapted for commercial and strial uses. Excellent for PA inside and outside; suitable as a "close-talk" mike. Non-tional below 3000 cps, semi-directional above 3000 cps. Clean design, TV gray finish. or High impedance, 150 to 250 or 15,000 ohms. **Frequency Response:** 75-10,000 cps. **tive Output Level** (at 1000 cps): Lo-Z, −56 db; Hi-Z, −59 db. **Size:** 5 1/2" h. x 1 5/8" w. d. **Cable:** 25 ft. shielded, two-conductor. Weight, 1 lb., with cable.

Type SK-45B (MI-12045B) Aeropressure Microphone—List Price....... \$74^{38}

TYPE BK-1A PRESSURE MICROPHONE

gned for versatility; for use at TV, FM and AM stations. Excellent for use in open-air ips and where performer must work close to the mike. Mounts on swivel socket base asy selection of speaking angle; removable for portable or stand-mounted use. Non-tional when mounted vertically, semi-directional when horizontally mounted. **uency Response:** 60-10,000 cps. **Output Impedance:** 30, 150 or 250 ohms. **Effective out Level:** −52 dbm. **Size:** 7 3/4" long, including mount; 1 7/8" diameter. **Stand nt:** 1/2" pipe thread. Weight, 18 oz.; base, 19 oz. **Cable:** 30 ft. shielded three-con-or; no plug. Finish, TV gray and chrome.

Type BK-1A (MI-11007) Pressure Microphone With Base—List Price. \$183^{37}
Type BK-1A (MI-11007) Microphone Without Base—List Price.......**$168.75**

TYPE SK-40 AERODYNAMIC MICROPHONE

t weight and small; fits palm of hand. Excellent for close talking applications. May sed outdoors; minimum wind response. Unaffected by temperature or humidity. Low dance output, balanced; high impedance output, unbalanced. Alnico V magnet. **Fre-cy Response:** 70-9,000 cps. Non-directional below 2 kc, becoming less sensitive at and sides as frequencies increase. **Output Level:** −55 dbm. **Output Impedance:** 25,000 s. **Mount:** 5/8"-27 fixture thread. **Cable:** One-conductor. **Finish:** Umber, gray. **Size:** w. x 2 3/4" d. x 3 1/4" h. Weight, 15 oz., less cable.

Type SK-40 (MI-12040) Microphone—With 7 ft. cable. List Price...... \$35^{70}
Type SK-40 (MI-12040-A) Microphone—With 25 ft. cable. List Price...**$41.00**

TYPE MI-4068-G DELUXE FLOOR STAND

dsome, sturdy adjustable floor stand; suitable for all RCA mikes. Height adjustable n 31 1/4" to 58", using large grip-type clutch. Felt gliders prevent 12" base from tipping. Weight, 11 lbs.

Type MI-4068-G Floor Stand—List Price.............................. \$16^{50}

TYPE MI-6427 PUSHMIKE ADAPTER

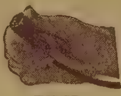
rt table stand kit with built-in mike switch. Use with most RCA mikes. Switch is DT anti-capacity type, "push-to-talk" or "lock-in-talk". Extra contacts for use in DC operation. **Mount:** 5/8"-27 male or female thread. **Size:** 7 3/4" high; 5 3/4" base.

Type MI-6427 Pushmike Adapter—
Price.. \$21^{90}

Type MI-4096A Table Stand—Chrome plated; adjustable 9" to 12 1/2" high. Base diameter. Weight, 2 1/2 lbs. List Price.................................**$9.90**

MI-12022

SK-46


BK-6B

BK-5A

SK-35

77-DX

SK-45B

BK-1A

SK-40

MI-4068-G

MI-6427

Neumann Microphones

Neumann Microphone Studio Systems consist of the microphone of your choice, the appropriate power supply, an elastic suspension system (or swivel for the M-49b and M-50b, which have built-in isolation), microphone-to-power supply interconnect cable, AC cord, and Cannon output connector. Power supplies come equipped with U. S. standard pilot lights, fuses, AC receptacles, and output connectors. Microphones may be used as far as 300 feet from their power supplies. For this purpose, additional interconnect cables are available in lengths of 25, 50 and 100 feet. Full elastic suspension units, which insure against mechanically transmitted noise, and swivel suspensions are equipped with U. S. standard ⅝"-27 microphone stand thread.

MODEL U-47 MICROPHONE SYSTEMS

The standard of American recording, broadcasting and film industries; the only condenser microphone in its price range with switchable directional characteristic. Features extremely smooth response, a wide dynamic range, absence of distortion and noise, and a readily changeable field of pattern. A small switch provides either a highly directional or non-directional characteristic. **Frequency Response:** ±3 db, 40-15,000 cps. **Output Impedance:** 50 and 250 ohms, switchable. **Field Pattern:** Non-directional or cardioid. **Residual Noise Level Equivalent:** 24 db loudness. **Non-Linear Distortion:** Less than 1% entire range to 110 db absolute. **Tube:** VF14. **Output Level at 1 kc:** Matched with 200 ohms: cardioid, 2.8 mv/dyne/cm² (−49 db); non-directional, 1.7 mv/dyne/cm² (−53 db). Complete unit consists of a microphone, power supply, cables, and plugs. **Dimensions:** Mike, 2½" dia., 8" long; Supply, 8½" x 4" x 4¾". **Weight:** Mike, 1½ lbs.; Supply, 4 lbs. Supply operates on 110 v., 40-60 cps. AC.

Neumann Model U-47a Microphone System—With NG power supply, UC-3 interconnect cable, Z-37 suspension, etc. Net Each.................................. $365⁰⁰

Neumann Model U-48a Microphone System—Same as U-47a, but field pattern is selectable bi-directional or cardioid. Net Each.................................. $365⁰⁰

Neumann Model U-47a or U-48a Double System—Consists of two microphones (specify U-47a or U-48a), NG-2 twin power supply, two UC-3 interconnect cables, two Z-37 suspensions, two output connectors, AC cord. Net Each......... $660⁰⁰

Neumann Model NG-2 Twin Power Supply—Will power two U-47a or U-48a mikes without interaction; separate rectification for each. Size, 8½" x 4" x 4¾". Weight, 5 lbs. Net Each.................................. $165⁰⁰

MODEL SM-2 MINIATURE STEREO MICROPHONE SYSTEM

This recent addition to the condenser microphone field consists of two separate and complete condenser mikes, and their respective preamplifiers, in a miniature housing. The two condenser capsules are mounted one above the other; top one is rotatable to permit M-S stereo recording technique (intensity stereo). Each microphone may be individually switched to any field pattern: Non-directional, bi-directional, cardioid, or any of six intermediate patterns. Extreme balance provided between systems. **Frequency Response:** ±3 db. 40-15,000 cps. **Output Impedance:** Specify 50 or 250 ohms when ordering. **Non-Linear Distortion:** Less than 0.8% entire range to 110 db absolute. **Size:** Mike, 1⅛" dia. x 8" long. Power Supply, 8½" x 4" x 4¾". **Weight:** Mike, 9½ oz.; Power Supply, 5 lbs.

Neumann Model SM-2 Stereo Microphone System—With NSM power supply, SC-1 interconnect cable, Z-42 suspension, etc. Specify output impedance desired. Net.... $815⁰⁰

MODEL M-49b VARIABLE DIRECTIONAL MICROPHONE SYSTEMS

The standard of the German broadcasting industry; permits remote control of the directional characteristic. Smooth, continuous fader control selects non-directional, bi-directional, cardioid and any intermediate pattern. Slight roll-off below 40 cps prevents shock-noise interference. Rugged construction. **Response and Distortion:** 0.6%, 40-15,000 cps up to 110 db absolute. **Size:** Mike, 3" dia. x 6¼" long. Power Supply, 8½" x 4" x 4¾". **Weight:** Mike, 1¾ lbs.; Power Supply, 5½ lbs.

Neumann Model M-49b Microphone System—With NN-48a power supply, C-26 interconnect cable, MZ-49 suspension, etc. Net Each.................................. $495⁰⁰

Neumann Model M-50b Microphone System—Same as M-49b, but frequency sensitivity and the field pattern subtly modified to match room-sound characteristics of large halls. Net Each.................................. $520⁰⁰

KM SERIES MINIATURE CONDENSER MICROPHONE SYSTEMS

These miniaturized microphones meet the same high performance standards found in the U-47 microphone series. **Frequency Response:** ±3 db, 40-15,000 cps. **Output Impedance:** 50 or 250 ohms; specify when ordering. **Non-Linear Distortion:** Less than 0.8%, entire range to 110 db absolute. **Size:** Mike, ⅞" dia. x 6" long (Model KM-56); power supply, 8½" x 4" x 4¾". **Weight:** Mike, 4 oz.; power supply, 5 lbs.

Neumann Model KM-56 Miniature Microphone System—With NKM power supply, KC-1 interconnect cable, Z-38 suspension, etc. Field pattern: Non-directional, bi-directional, cardioid (switchable). Net Each.................................. $465⁰⁰

Neumann Model KM-54a Miniature Microphone System—Same as KM-56, but cardioid pattern only. Length 4¾". Net Each.................................. $435⁰⁰

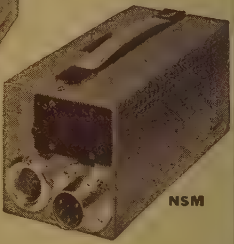
Neumann Model KM-53a Miniature Microphone System—Same as KM-56, but non-directional only. Length, 4¾". Net Each.................................. $415⁰⁰

U-47a

M-49b

KM-53a

Power Supply


NSM

SM-2

KM-54a in Z-38

Neumann Model Z-18 Windscreen—Gauze-screened sphere 2 dia. Prevents low frequency wind noise and talking "pops" fr interfering with recording. Fits easily and quickly over all KM series mikes. Net Each.................................. $17

Neumann Model Z-29 Overload Protector—Miniature switch serts between capsule and amplifier of KM-53a and KM-54a mi to restrict level fed to preamp when high intensity sound levels to be recorded at close range. Switchable, straight through, 10 db and 18 db attenuation. Net Each...... $39

NEUMANN FULL ELASTIC SUSPENSION UNITS

These units, uniquely designed to float the microphone in a rub truss system, guard against impact noise, building noise, foots and similar noise sources.

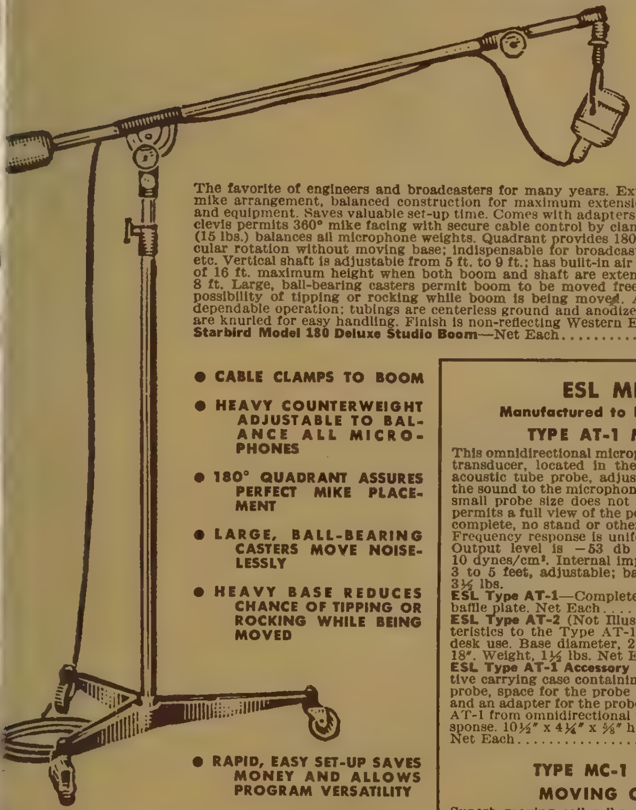
Neumann Model Z-37 Suspension—For use with U-47a or U-48a microphones. Net Each.............. $37

Neumann Model Z-38 Suspension—For use with KM-53a, KM-54a, or KM-56 microphones. Net Each.. $32

Neumann Model Z-42 Suspension—For use with SM-2 microphones. Net Each.................................. $32

udio Mikes, Booms and Cable

STARBIRD DELUXE STUDIO MICROPHONE BOOM



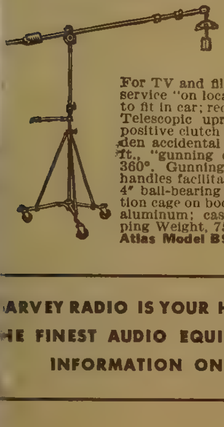
- ADJUSTS TO 4' MINIMUM, 8' MAXIMUM HORIZONTAL LENGTH
- VERTICAL ADJUSTMENT 5' MINIMUM, 9' MAXIMUM
- 360° MIKE FACING SWIVEL
- AIR VALVE CUSHIONS VERTICAL DESCENT

The favorite of engineers and broadcasters for many years. Extra flexible design permits almost any mike arrangement, balanced construction for maximum extension with complete safety for personnel and equipment. Saves valuable set-up time. Comes with adapters to fit all standard microphones. Swivel clevis permits 360° mike facing with secure cable control by clamp on boom. Adjustable counterweight (15 lbs.) balances all microphone weights. Quadrant provides 180° movement vertically or complete circular rotation without moving base; indispensable for broadcasts involving moving groups of people, etc. Vertical shaft is adjustable from 5 ft. to 9 ft.; has built-in air valve to cushion descent; permits total of 16 ft. maximum height when both boom and shaft are extended. Boom length adjustable, 4 ft. to 8 ft. Large, ball-bearing casters permit boom to be moved freely without noise; heavy base reduces possibility of tipping or rocking while boom is being moved. All parts are accurately machined for dependable operation; tubings are centerless ground and anodized for smooth action; adjustment parts are knurled for easy handling. Finish is non-reflecting Western Electric gray.
Starbird Model 180 Deluxe Studio Boom—Net Each.............................. $189.50

- CABLE CLAMPS TO BOOM
- HEAVY COUNTERWEIGHT ADJUSTABLE TO BALANCE ALL MICROPHONES
- 180° QUADRANT ASSURES PERFECT MIKE PLACEMENT
- LARGE, BALL-BEARING CASTERS MOVE NOISELESSLY
- HEAVY BASE REDUCES CHANCE OF TIPPING OR ROCKING WHILE BEING MOVED
- RAPID, EASY SET-UP SAVES MONEY AND ALLOWS PROGRAM VERSATILITY

ATLAS SOUND "PORTO-BOOM" MIKE DOLLY

MODEL BS-37



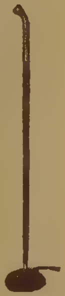
For TV and film studios as well as portable service "on location". Can be knocked down to fit in car; requires no tools for reassembly. Telescopic upright extends 5¼-9 ft., has positive clutch and air check to prevent sudden accidental collapse. Boom extends 7-18 ft., "gunning control" to rotate mike full 360°. Gunning extension and base guide handles facilitate following performer. Quiet 4" ball-bearing rubber casters. Special isolation cage on boom floats mike on rubber. All aluminum; cast iron counterweight. Shipping Weight, 75 lbs.
Atlas Model BS-37—Net Each. $375.00

ARVEY RADIO IS YOUR HEADQUARTERS FOR HE FINEST AUDIO EQUIPMENT. WRITE FOR INFORMATION ON NEW ITEMS.

ESL MICROPHONES

Manufactured to ESL Specifications by Labor.

TYPE AT-1 MOVING COIL MIKE



This omnidirectional microphone features a moving coil transducer, located in the microphone base, and an acoustic tube probe, adjustable in length, to conduct the sound to the microphone element in the base. Very small probe size does not distort the sound field and permits a full view of the performer. The microphone is complete, no stand or other accessories being required. Frequency response is uniform, ±3 db, 30-10,000 cps. Output level is −53 db with reference to 1 mw/10 dynes/cm². Internal impedance, 200 ohms. Height, 3 to 5 feet, adjustable; base diameter, 6¾". Weight, 3½ lbs.

ESL Type AT-1—Complete with directional baffle plate. Net Each.................... $80.00

ESL Type AT-2 (Not Illustrated)—Similar in characteristics to the Type AT-1, but designed for table or desk use. Base diameter, 2½"; tube length, 18". Weight, 1½ lbs. Net Each........... $79.50

ESL Type AT-1 Accessory Kit—Consists of an attractive carrying case containing an extension tube for the probe, space for the probe tip, the plastic baffle plate, and an adapter for the probe that will convert the Type AT-1 from omnidirectional to a true polar projected response. 10½" x 4¼" x ⅝" h. Weight, 1¾ lbs. Net Each............................ $37.15

TYPE MC-1 OMNIDIRECTIONAL MOVING COIL MICROPHONE

Superb moving coil mike; will meet the most exacting professional requirements for music and speech. Regularly used by European broadcast companies, yet priced low to meet the home recording market for high quality microphones. Convenient socket enables connection to the table-top base (supplied) or to a camera tripod, if desired. Frequency response uniform, ±3 db, 50 to 15,000 cps. Internal impedance, 200 ohms. Output level, −47 db referred to 1 mw/10 dynes/cm². Omnidirectional performance meets most recording and broadcast requirements. **Size:** 4¾" x 1¹⁵⁄₁₆" x 1¹⁵⁄₁₆", including base. Weight, 8 oz., with base.

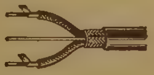
ESL Type MC-1—Complete with base. Net Each..... $42.50

ESL Type MC-1A Table Stand—Net Each............ $5.40

Complete ESL catalog covering microphones and input transformers available on request.

HARVEY SPECIAL AUDIO CABLE

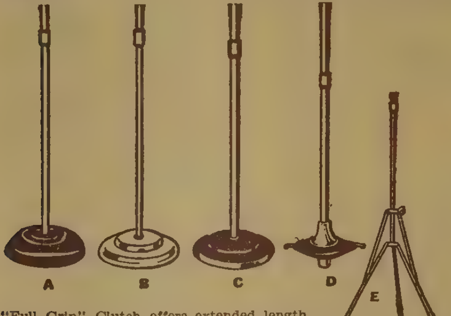
BUILT TO HARVEY RADIO'S OWN SPECIFICATIONS



Plastic coated, audio rack wiring cable. Two conductors are #22 twisted, stranded wire with tin, braided shield. Solid tin ground wire and conductors covered with plastic overall. Two types available: SF-1 has gray jacket over pushback shield. Type SF-2 covered with black, wrap-around braid. Designed specifically for studio and broadcast use; made to Harvey Radio's own specifications.
Type SF-1 or SF-2 Audio Cable—Net per 1,000 ft..... $50.00

Microphone Stands, Speakers

FLOOR STANDS, BOOMS AND MIKE ACCESSORIES



"Full Grip" Clutch offers extended length body, permitting secure, full-hand grip. Clutch inner-lined with wear-proof bakelite locking collet. All bases functionally designed and include self-leveling, shock-absorbing pads, plus 3 additional "anti-tip" points between pads. Tube assemblies are "super-chrome" plated. All models terminate in ⅝″-27 machined thread.

Atlas No.	Fig.	Base Finish	Height, Adjust.	Base Diameter	Wt. Lbs.	Net Each
MS-10C	A	Gray Shrivel	35″-64″	10″	9	$ 5.85
MS-12C	A	Gray Shrivel	35″-65″	10″	12	6.30
MS-11C	B	Full-Chrome	35″-65″	10″	12	7.80
MS-20*	C	Gray Shrivel	42″-72″	12″	15	9.60
MS-25*†	D	Chrome & Gray	42″-72″	17″	24	15.60
CS-1♯	E	Cadmium plate	23″-62″	Collapsible	5	10.80

*⅞″ telescoping tube, 1⅛″ base tube. †Features "Safety Air Lock Cushion" which prevents any accidental or sudden slippage of telescoping section which is at all times "cushioned on air" and the controlled escapement of air will only permit a slow, smooth and quiet collapse. ♯Collapses to minimum of 23″.

BS-36 Professional Boom Stand (Fig. F)—All advantages of "Floating Action" plus secure and dependable locking adjustment. Features "Air-Lock Cushion" and new gyromatic swivel joint at mike end of boom. Base casting equipped with "domes of silence". Boom length 62″, adjustable vertically from 48″ to 72″. All tubular sections super-chrome plated. Modern base. Shpg. Wt., 33 lbs. Net Each.. $37.80

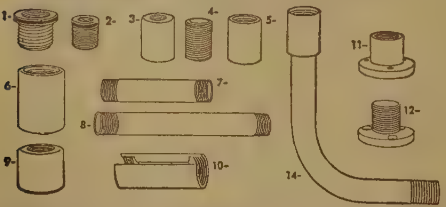
BS-36W Mobile (Fig. H)—Identical to Model BS-36 except for ball bearing hard rubber swivel caster base. Net Each. . $43.80

BC-1 Bracket Clamp (Fig. G)—Usable with BB-1, GN-13, etc. Can be removed and top flange bolted into position. Chrome tube, 6″ long. ⅝″-27 thread. Net Each........ $2.10

SO-1 "Snap-On" Microphone Attachment (Fig. I)—Permits any mike to be attached to or removed from any floor stand instantly, without threading. Ball bearing spring sleeve attachment: one section attached to mike, other to stand. Net Each......$1.65

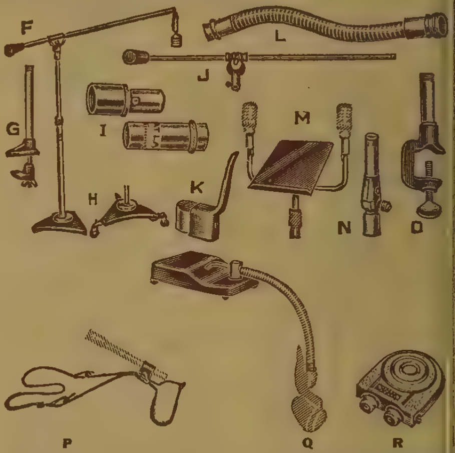
BB-1 "Baby Boom" Attachment (Fig. J)—Easily attached to any mike stand and locked in any position. Boom length 32″, chrome plated. Castings in gun metal shrivel. ⅝″-27 threads. Shpg. Wt., 4 lbs. Net Each............................ $4.50

MICROPHONE ADAPTERS AND FITTINGS



Model	Description	Net
AD-1	⅝″-27 female to ½″ pipe thd. male (RCA Adapter)	51c
AD-2	⅛″ pipe female to ⅝″-27 male	36c
AD-3	⅛″ pipe female to ⅝″-27 female	36c
AD-4	¾″ long, ⅝″-27 male running thread	18c
AD-5	⅝″-27 female to ⅝″-27 female coupling	36c
AD-6	⅞″-27 female to ⅞″-27 female coupling	60c
AD-7	3″ long tube ⅝″-27 male each end	36c
AD-8	6″ long tube ⅝″-27 male each end	42c
AD-9	⅞″-27 female to ⅝″-27 female	42c
AD-10	⅝″-24 male to ⅝″-27 female (W. E. Adapter)	72c
AD-11	Flange, ⅝″-27 female. Base diameter 1¼″	42c
AD-12	Flange, ⅝″-27 male. Base holes on ⅞″ mtg. ctrs.	42c
AD-13	⅞″-27 male to ⅝″-27 female (See Fig. 1)	51c
AD-14	Right angle bent tube: ⅝″-27 male and female each end	90c

Note: Thread sizes specified as ⅛″ pipe are I.P.S. (Electrical fitting); measures approx. ⅜″ dia. All adapters chrome plated.



CH-1 Cable Hanger (Fig. K)—Proven necessity on every mike stand. Fits all tubes, ⅞″ to 1¼″ diam.; attached and removed by 1 screw. Chrome finished. Net Each........ $1.50

GN-6 Flexible Goose Neck (Fig. L)—Attach to any stand or fixture. Ends have ⅝″-27 male and female threads. 6″ long. Polished chrome finish. Net Each.................. $1.20

GN-13—Same as GN-6, except 13″ long. Net Each......$1.65

GN-19—Same as above, except 19″ long. Net Each...... 2.40

TB-1 Duplex Mike Mount (Fig. M)—Use any 2 mikes on a single stand. Desk attachment and mike support arms detachable. Finished in chrome and cadmium. Molded composition desk, 9″ x 11″. Shpg. Wt., 2½ lbs. Net Each............ $6.60

SW-1 Gyromatic Swivel (Fig. N)—Permits any mike to be adjusted and locked into any position on any floor or desk stand. Super chrome finish. ⅝″-27 male and female threads. 4½″ long. Net Each.................................... $2.70

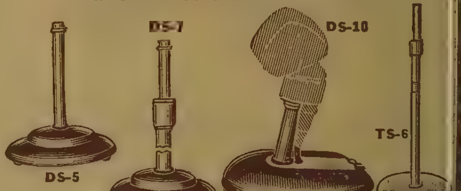
SK-1 Sky Hook (Fig. O)—Fastens securely to ledges, round pipes, stanchions. Has ⅝″-27 thread for any mike. Casting finish gun metal shrivel. 3″ long chrome tube. Net Each.. $2.10

NS-1 "Chesty" Neck Supported Mike Holder (Fig. P)—Adjustable three ways so that mike is always in a suitable "close-talking" position, reducing acoustic feedback. Wide, comfortable chest support prevents rolling. Flexible goose neck removable to permit use as hand-held mike. Entire unit can be used as desk stand. Weighs 6 oz. Net Each.................................. $3.00

SB-1 Switchboard Mike Support (Fig. Q)—Holds mike over telephone switchboards as well as on desks, dais, etc. The 12″ long, flexible goose neck is mounted on a spring-loaded swivel so mike can be swung aside. Feed-through hole conceals cable. Heavy, gray shrivel finished base is rear loaded to prevent tipping; has rubber bumpers; measures 9″ x 6½″; weighs 13 lbs. Net Each.................................... $8.40

FS-1 Mike Foot Switch (Fig. R)—"Press-to-open" switch, normally closed, thereby shorting mike. For all mikes having single-ended inputs. Can also be used to operate remote relay. Rubberized cork base; gray enamel finish. 2½″ x 3″. Net. $7.20

MICROPHONE TABLE STANDS



DS-5 "Velvet Action" Desk Stand—Uses full-sized clutch mechanism and ⅝″-⅞″ tube combination. Gun metal shrivel base. 6″ dia.; with pads. All tubular sections chrome finished. 6″ high (fixed). Weighs 2 lbs. Net Each................. $1.80

DS-7 Desk Stand—Height adjustable, 8″-13″; 3 lbs. Net.$3.00

DS-10 "Streamliner" Desk Stand—Mike cable concealed in slot under center section of chrome trim strip on base and directed out rear; cable held down by base—cannot drag. Gun metal opalescent enamel finish; chrome trim. ⅝″-27 thread; rubber bumpers. Shipping Weight, 1½ lbs. Net Each................ $3.00

TS-6 Adjustable Banquet Stand—Uses "Full Grip Velvet Action" control. Base and tube assembly finished in "Super-Chrome". Upright adjustable 14½″-26″. Base diameter, 8″. Weight, 5 lbs. Net Each.................................. $5.40

rofessional Audio Components

FAIRCHILD STEREO CUTTER AND LIMITER SYSTEMS

MODEL 641 STEREO CUTTER SYSTEM

644 Amplifier

642 Cutterhead

The first cutterhead designed especially for cutting 45/45 stereo discs. Not a compromise design.
An excellent stereo cutter, the Fairchild 641 also doubles as a lateral cutter capable of cutting high-level, high-quality monophonic discs.
Construction features an armature made in one piece of solid aluminum; high temperature windings and impregnation assures high reliability. Nothing to adjust, burn out, or go out of order. This is the first cutter system using modern, all-ceramic output tubes in two rugged, high-power amplifiers built on a single chassis. Operation is entirely in Class A with minimum distortion, yet capable of delivering peak power when required. Feedback control, over a wide frequency range, minimizes distortion.

SPECIFICATIONS

Input Impedance: 150/600 ohms. **Input Level Requirements:** −16 dbm, +8 dbm for 7 cm/sec.
Frequency Response: ±2 db, 20-15,000 cps each channel, entire system.
Harmonic Distortion: Less than 1%, 10 cm/sec. peak recorded velocity each channel, 20-15,000 cps. Capable of cutting 30 cm/sec. below 7 kc and 14 cm/sec. above 7 kc.
Channel-to-Channel Separation: Better than 20 db, 20-10,000 cps. In excess of 30 db at medium and low frequencies. Better than 10 db between 10 kc and 15 kc.
Fairchild Model 641 Stereo Cutter System—Complete.
Net Each.. $6650.00

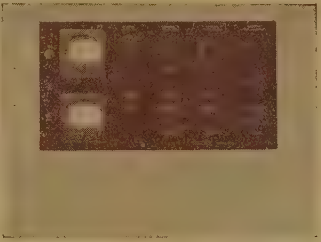
MODEL 670 STEREO LIMITER

adical departure from the classical limiter gn; characterized by the complete absence udible thumps, distortion and noise. Anr feature is its extreme stability over long ods of time.

Fairchild Model 670 may be operated either wo independent limiters or as a verticalral component limiter. Function change le by the flick of a switch. The complete is enclosed within 14 inches of rack space.

pecial feature of the unit is its ability to luce full limiting effect during the **first 00ths of a second** (unlike conventional ters that pass short transients due to their wness of attack).

Rear View



Front View

SPECIFICATIONS

ut Impedance: 600 ohms each channel.
tput Impedance: 600 ohms each channel.
ut Level Range: 0 dbm to +16 dbm. **Gain:** 7 db.
quency Response: ±1 db, 20-15,000 cps.
aration: 60 db, A-B position; 35 db, Vertical-Lateral position.
or Harmonic Distortion: Less than 1% at any level up to +18 dbm output (no limiting). Less than 1% at 10 db limiting +12 dbm output.
Release Time: Adjustable 0.3 to 25 seconds in 6 positions.
Power Required: 3 amps, 115 v. AC, 50-60 cps.
Fairchild Model 670 Stereo Limiter—
Net Each.................................... $1435.00

McINTOSH INDUSTRIAL POWER AMPLIFIERS

MI-200AB

MODEL MI-200AB 200-WATT AMPLIFIER

High efficiency output circuitry delivers high power and distortion-free performance for laboratory and industrial audio requirements. May be operated from any signal source delivering 0.5 volts or more; or directly from a McIntosh audio compensator. Components used are of the highest quality to assure long, trouble-free performance. An input transformer socket provides plug-in low-Z or isolated bridging inputs. **Power Output:** 200 watts, continuous; 400 watts peak. **Frequency Response:** ±0.2 db, 20-20,000 cps at 200 watts. **Distortion:** Less than 1% harmonic at 200 watts, 20-20,000 cps; less than 1% IM if instantaneous peak is below 400 watts. **Hum and Noise:** −85 db or more at rated output. **Input:** 0.5 volts will drive amplifier to 200 watts; gain control provided to handle input levels up to 20 volts; greater sensitivity possible by use of plug-in transformer. Impedance, 250,000 ohms. **Output Impedance:** 4, 8, 16.5 (57½ v.), 25 (70.7 v.), 100 (141.4 v.) and 600 ohms (balanced to ground); low-Z outputs may be balanced or unbalanced as well as isolated from ground. **Damping Factor:** 10:1 or greater, 20-20,000 cps. **Controls:** On-Off Switch; Gain; Meter Switch for built-in Output Meter on front panel. **Tubes:** 1-12AX7, 1-12AU7, 2-6AV5, 2-6BX7, 2-8005, 4-5U4, 2-5Y3. **Power Required:** 300-600 watts, 108/117/125 v. AC, 50/60 cps; fused. **Size:** 10½" h. x 19" w. (standard rack) panel; 9" behind panel for amplifier. 7" w. x 9" behind panel, power supply. Panel finished in dark gray hammertone. Weight, 140 lbs.
McIntosh Model MI-200AB Amplifier—Net Each...................... $549.00

MI-60

MODEL MI-60 60-WATT AMPLIFIER

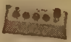
Lower powered version of above, this industrial amplifier meets the needs for high power with low-distortion performance. Exclusive high efficiency output circuit using bifilar transformer assures low distortion. **Power Output:** 60 watts continuous; 120 watts peak. **Frequency Response:** ±0.2 db, 20-20,000 cps at 60 watts; +0, −1 db, 16-40,000 cps at 60 watts. **Distortion:** Less than 0.5% harmonic at 60 watts, 20-20,000 cps; less than 0.5% IM if instantaneous peak is below 120 watts. **Hum and Noise:** −90 db or more at rated output. **Input:** Approx. 0.5 volt will drive amplifier to 60 watts; gain control handles input levels up to 20 volts; plug-in input transformers available for greater sensitivity. Impedance, 250,000 ohms. **Output Impedance:** 4, 8, 16 and 600 ohms; 70.7 and 117 volts; windings isolated from ground and may be balanced or unbalanced. **Damping Factor:** 15:1 or greater, 20-20,000 cps. **Controls:** On-Off Switch; Gain; Pilot Light; Fuse on front panel. **Tubes:** 2-12AX7, 1-12AU7, 1-12BH7, 2-6550/KT88, 2-5U4GB. **Power Required:** 155-280 watts, 117/125 v. AC, 50/60 cps; fused. **Size:** 8¾" h. x 19" w. (standard rack) x 9" behind panel. Weight, 46½ lbs.
McIntosh Model MI-60 Amplifier—Net Each......................... $240.00

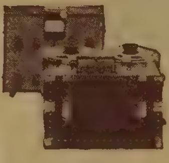
AMPEX
CORPORATION
professional products division

Tape Recorders, Duplicators

NEW SERIES 351 RECORDERS

351-C


5763-02


351-P

The highest standard in professional recorders. Printed circuit design, plug-in connections, low noise input stage and push-pull output. Internal power supply. Optional remote control. **Tape Speeds:** 7½"/sec. and 15"/sec. or 3¾"/sec. **Frequency Response:** ±2 db, 30-15,000 cps at 15"/sec.; ±4 db, 30-15,000 cps at 7½"/sec.; ±2 db, 50-7,500 cps at 3¾"/sec. **Signal-to-Noise:** Better than 60 db. **Flutter and Wow:** Below 0.2% rms at 7½"/sec. **Playing Time:** Up to 4 hrs., 16 min. on 10½" NAB reel at 3¾"/sec. **Record Input:** Low-Z mike or 600-ohm, balanced on unbalanced. **Output:** Plus 8 VU into 600 ohms, balanced or unbalanced; approx. 2 volts to high-Z amplifier; +4 VU by restrapping. **Controls:** Stop, Start, Fast Fwd. and Rewind Pushbuttons; Record Button (one per channel on stereo models); Motor Speed and equalization by separate switches. Reel Size Selector (for tension adjust). **Power Required:** 117 v. AC 60 cps; 50 cps available at extra cost. **Size:** 24½" w. x 28½" d. x 48" h., console; 15¾" h. x 19" w. (for rack mtg.), transport; 7" h. x 19" w., electronic assembly.

MAGNETIC TAPE RECORDERS

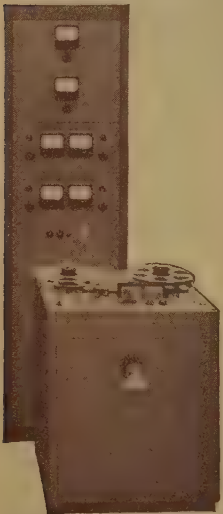
Ampex Model	Catalog Number	Mounting	Tape Speeds	Track	Net Each
351-U	30700-01	Uncased	7½-15	Full	$1350.00
351-U	30700-13	Uncased	3¾-7½	Full	1400.00
351-U	30700-07	Uncased	7½-15	Half	1350.00
351-U	30700-09	Uncased	3¾-7½	Half	1400.00
351-P	30700-05	Portable	7½-15	Full	1440.00
351-P	30700-17	Portable	3¾-7½	Full	1490.00
351-P	30700-11	Portable	7½-15	Half	1440.00
351-P	30700-23	Portable	3¾-7½	Half	1490.00
351-C	30700-03	Console	7½-15	Full	1475.00
351-C	30700-15	Console	3¾-7½	Full	1525.00
351-C	30700-09	Console	7½-15	Half	1475.00
351-C	30700-21	Console	3¾-7½	Half	1525.00
351-2U	30810-01	Uncased	7½-15	Two*	1865.00
351-2U	30810-05	Uncased	3¾-7½	Two*	1930.00
351-2P	30810-03	Portable	7½-15	Two*	1955.00
351-2P	30810-07	Portable	3¾-7½	Two*	2020.00

*Separate erase heads supplied; for CCIR equalization, add to Net, **$40.00.** For single channel models with CCIR equalization, add to Net, **$20.00.** Not available for Models 30700-11, -23.

ACCESSORIES AND CASES

Ampex Number	Description	Net Each
5763-02	Wired remote in housing and 30 ft. cable	$ 66.00
5763-03	Unwired remote for panel mounting, no cable	27.50
5728-00	Console cabinet (single channel only)	206.00
5727-01	Portable top-plate case	72.50
4100-00	Single channel electronics case	36.00
3935-01	Two-channel electronics case	48.00
TM-1008	Operation and maintenance manual	4.00

SERIES 3300-B TAPE DUPLICATOR



Versatile system utilizes a master playback unit and up to 10 slave recorders to duplicate 4-track 7½"/sec. commercial stereo tapes; copies two stereo tracks in forward and two in reverse directions at the same time. Operates at 120"/sec. and 60"/sec. for fast duplication, master tapes of 15"/sec. original speed are duplicated at 8:1 or 4:1 speed ratios, depending on desired final speed. System uses two 2-track head stacks for ½" wide tape; reproduces ¼", 4-track 7½"/sec. stereo tapes as well as 3¾"/sec. stereo tapes. **Frequency Response:** ±2 db, 40-12,000 cps on 7½"/sec. duplicates from suitable 15"/sec. AME masters; −4 db or less at 15,000 cps. **Flutter and Wow:** Less than 0.2% rms in duplicates, 0-300 cps. **Reel Size:** Up to 14" dia. **Heads:** Permanently align stacks. **Master Unit Electronics:** Bias oscillator and slave oscillator; two 2-channel record amplifiers; master control panel; four playback amplifiers mounted in base. **Controls:** Push buttons for Start Record-Stop, all units operate individually or from Master Control; Indicator Lights. **Equalization:** Copies made without appreciable change in response from master tape. **Power Required:** 117 v. AC, 60 cps; 50 cps available at no extra charge when specified. **Size:** 26" x 25" x 36½" h. plus 6 ft. equipment rack, each master and slave.

Ampex Model 3301-C Master—Console for 4-channel, 120"/sec. and 60"/sec. ½" wide tape playback to feed 1-10 slave recorders. Net Each.......................... **$7450.00**

Ampex Model 3302-C Slave—Duplicates on 4-channel, 7½"/sec. ¼" wide tape at 60"/sec. Net Each.............. **$2400.00**

Ampex Model 30645-02 Master Conversion Kit—Converts Type 3200 system Master to 4-track for 1-5 slaves. Net Each.............................. **$3695.00**

Ampex Model 30645-01 Conversion Kit—Same, but for 6-10 slaves. Net Each.............................. **$4195.00**

Ampex Model 30646-01 Slave Conversion Kit—Converts Type 3200 system slave to 4-track. Net Each.............. **$740.00**

Ampex Model 80000-01 Master Head Assembly—For replacement of playback head. Net Each.............................. **$425.00**

Ampex Model 80001-01 Slave Head Assembly—For replacement of recording head Net Each.............................. **$395.00**

Ampex Model TM-2002 Manual—Operation and maintenance manual for Series 3300 Duplicators. Net Each.......... **$4.00**

WE CAN SUPPLY ALL PARTS FOR REPLACEMENT ON AMPEX SYSTEMS AND COMPONENTS. WRITE US FOR INFORMATION ON REPLACEMENT PROBLEMS.

SERIES 352 TAPE REPRODUCERS

Plays prerecorded tapes for professional applications; perfect for transcribed radio programs; theatrical and studio use as well as in educational institutions. Playback functions are identical in reproduction quality to Model 351 recorder. Available in full-track, half-track and two-channel stereo models. **Tape Speeds:** 7½"/sec. and 15"/sec. **Frequency Response:** ±2 db, 30-15,000 cps at 15"/sec.; ±4 db, 30-15,000 cps at 7½"/sec. **Signal-to-Noise:** Better than 65 db. **Flutter and Wow:** Below 0.20% rms at 7½"/sec.; 0.15% rms at 15"/sec. **Playing Time:** Up to 2 hrs., 8 min. on NAB 10½" reel at 7½"/sec., half-track. **Output:** +4 VU into 600 ohms, balanced or unbalanced. **Controls:** Start; Stop; Fast Forward and Rewind Pushbuttons; Motor/Tape Speed; Equalization Switch; Reel Size Switch. Models listed are for 117 v. AC, 60 cps operation; 50 cps available at extra charge. **Size:** 24¼" w. x 24¾" d. x 35" h., console.

Ampex Model 352-U Player 9991-01 (Full-Track) or **9991-05** (Half-Track)—Uncased; 7½" and 15"/sec. Net Each.............................. **$1085.00**

Ampex Model 352-U Player 9991-09 (Full-Track) or **9991-13** (Half-Track)—Uncased; 3¾" and 7½"/sec. Net Ea. **$1135.00**

Ampex Model 352-2U Player 30689-01—7½" and 15"/sec. two-channel model; uncased. Net Each................ **$1350.00**

Ampex Model 352-2U Player 30689-03—3¾" and 7½"/sec. two-channel; uncased. Net Each...................... **$1415.00**

Ampex Model 6125-00 Console Cabinet—Net Each... **110.00**

Ampex Model 5763-02 Remote Control—Wired, in small housing; with 30 ft. cable. Net Each.......................... **$66.00**

Ampex Model 5763-03 Remote Control—Unwired, for flush mounting; less cable. Net Each.......................... **$27.50**

Ampex Model TM-1010 Manual—Operation and maintenance manual for 352 Series tape recorders. Net Each........ **$3.00**

AMPEX TAPE RECORDER ACCESSORIES

Ampex Model	Description	Net Each
704-00	Head demagnetizer	$ 8.25
087-077	4 oz. can approved head cleaning fluid	1.80
087-005	4 oz. can approved lubricating oil	1.60
4494-00	¼" w., 15"/sec. std. alignment tape	14.50
5563-00	¼" w., 7½"/sec. std. alignment tape	14.50
6000-00	¼" w., 3¾"/sec. std. alignment tape	14.50
50483-01	½" w., 15"/sec. std. alignment tape	21.00
6878-00	30"/sec. and 60"/sec. std. alignment tape	33.70
23634-01	Tape degausser, bulk eraser	69.50

MPEX
ORPORATION
professional
roducts division

Tape Recorders, Duplicators

SERIES 300 MASTER RECORDING TAPE RECORDERS

300-C

300-355C

xcelled performance verified by the continued domination of e units in the professional master recording industry. Available ingle or multi-channel models (2 to 8 channels), up to three alizations and a variety of mounting types. Transport uses e precision, heavy-duty motors; takes reels up to 14" dia.; es to 1" wide. Rigid unit assembly virtually eliminates flutter wow; massive flywheel, precision capstan drive and long tape h assure no skewing. Starts and stops instantaneously. Reed button control prevents accidental action. Fast/slow start tch permits "on" and "stand-by" capstan motor operations; vision made for remote control. Precision head alignment ures perfect playback of multi-channel recordings without se shift between channels. Exclusive "Sel-Sync" optional ture provides switching to convert any of the heads to serve as porary playback while others are still recording; permits nd-on-sound recording and other special effects. AB switch ws monitoring by VU meter, headphones plugged into front el, or by line-connected studio monitor circuit. **Tape Speeds:** "/sec. and 15"/sec. **Frequency Response:** ±2 db, 30-15,000 cps 15"/sec.; ±2 db, 40-10,000 cps and ±4 db, 30-15,000 cps at "/sec. **Flutter and Wow:** Less than 0.1% rms at 15"/sec.; % rms at 7½"/sec., measured 0-300 cps. **Noise Ratio:** 60 db, track; 55 db, multi-track, measured when erasing signal of k recording level in absence of new signal, 50-15,000 cps. **alization:** NAB 7½"/sec. and 15"/sec. selected by speed on gle channel unit; NAB 7½, NAB 15 or AME 15 switch selected multi-channel units; CCIR available on special order. **Inputs:** anced or unbalanced +4 VU bridging, single channel; plus tch selected low-Z mike on multi-channel units. **Controls:** rt, Stop and Record pushbuttons, relay operated; Normal, st Forward and Rewind on Selector; separate button on Multiannel units energizes record relay for that channel only; remote trol optionally available. **Outputs:** 600 ohm, +4 VU balanced unbalanced, single channel; 600 ohm, +8 VU or +4 VU by trapping, balanced or unbalanced, multi-channel. **Power quired:** 117 v. AC, 60 cps; 50 cps available at no extra charge en specified.

TAPE RECORDERS

mpex odel	Mounting	Tape Width	Tracks, Channels	Net Each
-U	Uncased	¼"	Full track, single channel	$2150.00
-C	Console	¼"	Full track, single channel	2250.00
-2U	Uncased	¼"	Two-channel	3490.00
-2C	Console*	¼"	Two-channel	3815.00
-2MU	Uncased	½"	Two-channel Special†	3696.00
-2MC	Console	½"	Two-channel Special†	4020.00
-3U	Uncased	½"	Three-channel	4374.00
-3C	Console*	½"	Three-channel	4698.00
-3SSU	Uncased	½"	Three-channel with "Sel-Sync"	4800.00
-3SSC	Console*	½"	Three-channel with "Sel-Sync"	5124.00
-4SSU	Uncased	½"	Four-channel with "Sel-Sync"	5576.00
-4SSC	Console*	½"	Four-channel with "Sel-Sync"	5900.00

cludes integral electronics rack. †For masters used in making rack 3¾"/sec. copies; less erase heads.

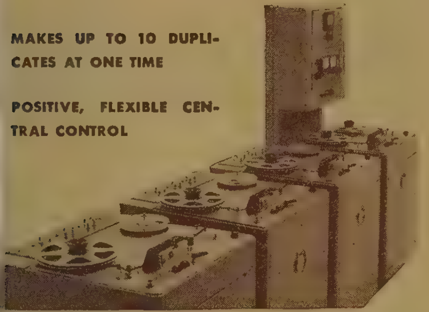
Single-Channel CCIR Equalization—Add to Net......**$36.00**
Two-Channel CCIR/AME Equalization—Add to Net.. **40.00**
Three-Channel CCIR/AME Equalization—Add to Net. **60.00**
Four-Channel CCIR/AME Equalization—Add to Net.. **80.00**
Write for Prices for Special Speeds (1⅞-30"/sec.), Heads and Extra Channels (Up to 8).

CABINETS, CASE AND MANUAL

Ampex Model	Description	Net Each
30942-02	Top plate portable case	$ 72.50
30942-01	Single channel electronics case	72.50
3935-01	Two-channel electronics case	48.00
30942-01	Three-channel electronics case†	72.50
521-01	Single channel console with meter panel hsg.	217.00
565-08	Console with housing for 3 channels max.	375.00
30874-01	Housing for up to 3 electronics units, attaches to No. 521-01 console	175.00
TM-2001	Operation and maintenance manual	4.00

*Requires one each No. 3742-00 panel (Net **$5.20**) and 3749-00 panel (Net **$2.80**), for complete installation.

SERIES 3200C TAPE DUPLICATOR



MAKES UP TO 10 DUPLICATES AT ONE TIME

POSITIVE, FLEXIBLE CENTRAL CONTROL

uplicates high quality tapes at low cost in either single or mass oduction runs. Meets the demands of audio engineers, broadcast chnicians, hi-fi enthusiasts and other critical users for high ality sound. A full system using a double-track master and ten ave recorders can reproduce in 8 minutes the material that would quire 20 hours using two standard recorders. Provides simulneous duplication of both tracks of a double track tape. Idencal quality of the duplicated material is assured once the proper plicating level is determined; tested and proved by thousands hours of successful commercial operation. Low cost duplication otained by low set-up time, high duplicating speed, simultaneous e of ten slaves, simplified quality control and the long lived ature of the equipment. The basic system consists of a master ayback unit, master amplifier panel, master bias oscillator, aster control panel and one duplicating recorder; additional aves may be added at any time up to a maximum of ten. **Features:** Simultaneous control by master panel of all components. ushbutton start; full speed attained in 5 to 10 seconds. Master it and each slave equipped with full controls. Any slave may be stopped or started during duplication without affecting operation of others. All operations are meter-monitored. Handles reels up to 14" dia. Duplicates single or double-track masters in one pass of the tape. Produces 1200 hours of playback material in an 8-hour work day. Runs master tapes "backward" to eliminate need for rewinding duplicates before using. **Tape Speeds:** 30"/sec. and 60"/sec. **Frequency Response:** ±2 db, 50-5,000 cps (±4 db, 50-7,500 cps) for 3¾"/sec. duplicate from 3¾" or 7½"/sec. master; ±2 db, 50-15,000 cps for 7½"/sec. duplicate from 7½" or 15"/sec. master. **Signal-to-Noise Ratio:** Duplicates exceed 55 db in 7½"/sec. made at either 30" or 60"/sec. speed from 15" or 7½"/sec. masters. **Controls:** Central Start, Stop and Record for all units from master control panel; Optional individual controls for each unit; Tape Speed, Reel Selector, Power Switch, Pilot Light, Rewind/Fast Forward/Play selector for each unit. **Monitoring:** Individual metering jacks for each head circuit for use with VTVM and audio oscillator. **Head Assemblies:** Plug-in type with two half-track play heads (one only is used for single-track duplication) for master; plug-in type with two half-track and one full-track heads for recording. **Power Required:** 115 v. AC, 60 cps; 50 cps available at no extra charge if specified. **Size:** 25½" x 26" x 36½" h. with rack extending 23" above top plate, consoles; 49" rack space, master; 8¾" rack space, master oscillator; 8¾" rack space, master amplifier panel; 3½" rack space, master control panel; 29¾" rack space, each duplicating recorder.

Ampex Model 3201-C Master Playback Unit—To drive 1 to 10 slaves; with electronics housing; operates at 30"/sec. and 60"/sec. Net Each.................... **$5100.00**

Ampex Model 3202-C Slave Recording Unit—Operates at same speeds for re-recording. Net Each.... **$1850.00**

Ampex Model 30645-02 Master Conversion Kit—Converts 3200 master to 3300 duplicator for 4-track duplication for operating 1 to 5 slaves. Net Each..........................**$3695.00**

Ampex Model 30645-01 Conversion Kit—Same, but for operating 6 to 10 slaves. Net Each..........................**$4195.00**

Ampex Model 30646-01 Slave Conversion Kit—Converts 3200 slave to 4-track, 3300 type duplicator. Net Each.....**$740.00**

Ampex Model 17731-01 Electronics Housing—Attaches to console. Net Each....................................**$150.00**

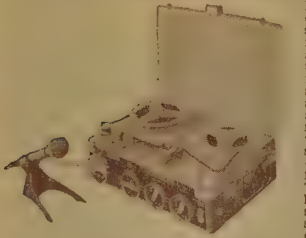
Ampex Model 475-26 Master Head Assembly—Replacement head assembly for playback master. Net Each............**$370.00**

Ampex Model 475-28 Slave Head Assembly—Replacement head assembly for recording slave. Net Each............**$395.00**

Ampex Model TM-1002 Manual—For operations and maintenance information. Net Each..........................**$4.00**

Recording Equipment, Accessories

NAGRA PORTABLE RECORDER IIIB



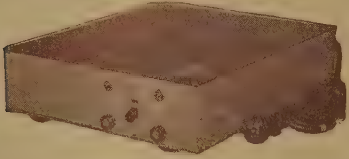
Professional tape recorder uses 30 transistors; operates on 12 flashlight cells. Unaffected by impact, tropical or polar climates, altitude, salt-air and general open-air use. Speed, wow and flutter, signal noise and response is within NAB primary standards; has CCIR (European Standard) for overseas usage. Two mixing inputs lend to the units versatility. Monitor speaker; balanced line output (+6 VU) and AGC are among its dominant features. Takes 5" reels (cover closed) and 7" reels (cover open). Motor is servo controlled. **Tape Speeds:** 15, 7½ and 3¾"/sec., switched. **Equalization:** NAB and CCIR. **Frequency Response:** ±1.5 db, 30-15,000 cps at 15"/sec.; ±2 db, 40-12,000 cps at 7½"/sec. **Signal-to-Noise Ratio:** Better than 55 db. **Wow and Flutter:** 0.15% at 15"/sec. p-p; 0.20% at 7½"/sec. p-p. **Playing Time:** One hour with 7" full reel. **Input Impedance:** 50-300 ohms (mike at −70 VU); 100,000 ohms for bridging (Hi., 2 line). **Output Impedance:** Feeds 200-600 ohm balanced broadcast lines at +6 VU from normally recorded tape. May also be used as a remote pickup amplifier to feed line. **Controls:** Record or Playback Mode; Mike Level; Line Level and Playback combined. **Size:** 8¾" x 12½" x 4½". Weight, 15 lbs. With batteries, less mike and cable.

Nagra Model III B Recorder—Net Each........... $875.00

Leather Carrying Bag—For above recorder. Net Each..$24.00

CINEMA TAPE ACCESSORIES

MODEL 9205-A TAPE AND FILM DEGAUSSER



Recommended for the most complete erasure of program and residual noise from magnetic tape and film. Two powerful fields demagnetize up to 5400 foot reels of ¼" tape and 1000 feet of 35 mm film. Designed for industrial use with heavy duty double pole switch, double fused, with dual pilot lights. Degaussing accomplished by rotating reels by hand on top surface of case (black phenolic top has locating spindle). As reels are withdrawn from the field, rotation is continued. Furnished in heavy steel case, gray baked enamel finish. **Size:** 3¾" x 12" x 14". Shipping Weight, 37 lbs.

Cinema Model 9205-A Degausser—Net Each......... $69.50

MODEL 8905 MAGNETIC ERASING PENCIL

For erasing limited, small areas of magnetic tape or film. A syllable or even part of a word may be erased. Thus, errors and editing may be accomplished without complete reworking of area involved. Made of black phenolic material, with a six foot cord and press-to-operate switch, it generally resembles a large fountain pen. Active area at tip, .281" diameter. **Power Requirements:** 115 volts, 60 cps AC, 10 watts. **Overall Dimensions:** ⅝" diameter, 8" long, plus six foot cord. Weight: Net, 6 oz.; Shpg., 12 oz.

Cinema Model 8905 Magnetic Erasing Pencil—Net Each.............................. $15.00

TECH LABS EDITING BLOCK KIT

Combines both older models into one professional kit. Used widely by all tape editors. Patented, curved longitudinal groove which holds the tape securely without use of clips or similar devices. Is precision machined from a rectangular rod of dural aluminum. Holes provided for easy mounting. Standard 45° groove is supplied for normal splicing and editing; perpendicular groove for editing of telemetering and computing application tape also provided. Kit contains professional block, marker pencil, cutting blades, knife, splicing tape and complete instruction booklet.

Tech Labs Model S-3 Editing Block Kit—Net Each..... $8.95

Tech Labs Professional Block Only—Net Each.........$8.00

STELLAVOX MINIATURE TRANSISTORIZED TAPE RECORDER

Studio quality in a battery operated tape recorder. Utilizes dependable transistors, printed circuits, rechargeable dry batteries and a precision motor with electronic speed control. Contains 7 transistors and 1 diode. Tape reels, 3½" diameter, are provided with 33' of recording tape, enough for 20 minutes of recording time. Monitoring speaker is located beneath the right-hand tape reel. High frequency erase head and combined playback head for half-track or two-track in accordance with NAB specifications. **Tape Speed:** 7½"/sec., accurate to ±0.5%. **Frequency Response:** Recording, ±2 db, 30-14,000 cps; playback, ±3 db, 60-14,000 cps. **Wow and Flutter:** 0.4%, peak-to-peak. **Signal-to-Noise Ratio:** 50 db. **Input:** Microphone, 200-1,000 ohms, at 0.2 millivolt. **Output:** 0.3-0.5 v., 10 ohms. **Controls:** Volume; Main Switch (Record, On/Off, Play); Recording Level (during recording); Battery Control (during playback); Reel Gauge and pilot lamp for electronic speed regulator. **Temperature Range:** −12° C to +50° C. **Size:** 2⅜" x 4⅞" x 10¼". Weight, 4 lbs. (approx.).

Stellavox Model SM-4 Tape Recorder—In leatherette covered wooden case. Net Each.................... $399.00

Power Supply—Net Each............................$79.00

Loudspeaker Amplifier—Transistorized loudspeaker amplifier for playback of recordings. Net Each.....................$75.00

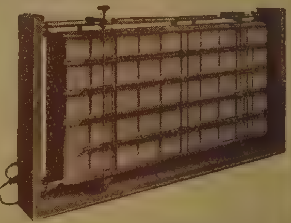
EMT BROADCAST EQUIPMENT

EMT 930 COMPACT TURNTABLE

Compact playback turntable with heavy main turntable, a start/stop brake for instant cueing and accurate-to-the-syllable tone insertion, and self-starting synchronous drive. Playback of standard and microgroove records by means of EMT-Ortofon dynamic pickup with sapphire or diamond styli, via built-in equalizer-amplifier. **Motor:** Self-starting, noiseless single phase synchronized motor whose field is automatically regulated. **Speeds:** 33⅓-45-78 rpm. 16⅔-33⅓-45 rpm also available. **Rumble:** Less than 50 db referred to program level, measured after installed pre-amplifier in equalizer position "IEC". **Wow:** Less than 0.04% rms. **Controls:** Main switch with the positions "Off", "On" and "Operation"; Speed selector (can not be switched while in position "Operation" to avoid damage of transition shaft); Switch with positions "brake free" and "brake released" and blocked "remote" position; Equalization (DIN, BBC, IEC, NAB, RIAA). **Size:** Chassis (for installation in consoles) 19 11/16" w. x 15⅜" d. x 9 13/16" h. 7" depth below chassis for installation. **Turntable Diameter:** 13". **Finish:** Hammertone gray lacquer. Weight, 46.5 lbs.

Model EMT 930 Compact Turntable—Net Each... $825.00

EMT 140 REVERBERATION UNIT

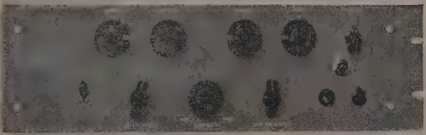


Vibrating metal plate in free suspension, with a dynamic exciter system and piezoelectric contact pickup cartridge. A true, natural echo is provided by the dying down of vibration notes, sounding more natural than echo chambers of usual size. The reverberation period is controlled by a parallel sliding damping plate. Built-in exciter and equalization amplifier. Suitable for radio, TV, film and recording studio use as a superior replacement for echo-rooms. The EMT 140 reverberation generator can be conveniently located, because of its low radiation and low sensitivity to outside sounds; several units can be operated next to one another without interference. Distortion-free output; no coloration of original sound. Gradual decay of reverberation—not as is obtained with tape devices. Adaptable for either special effect, symphonic or jazz music. **Input Level:** 1.55 volts (program line). **Output Level:** 1.55 volts (program line). **Frequency Range:** 30-12,000 cps. **Reverberation Time:** Between circa 1.2 sec. and 6 sec. **Power Supply:** 220 volts. **A/C Mains:** 220/110 volts, 50 cps. **Size:** 1' 11.62" w. x 8' 2.4" l. x 4' 3.17" h. **Color:** Natural wood tan. Weight, 370 lbs.

Model EMT 140 Reverberation Unit—Net Each.. $2120.00

ultec Program Equipment

MODEL EQP-1A PROGRAM EQUALIZER



y useful in electronic and acoustic research and control. Three and five high boost frequencies. **Shape Control:** High boost ves variable sharp to broad. **No Loss:** Passive equalizer plus sh-pull amplifier. **Professional:** 600, 250 and 150 ohms, in and . Low noise and distortion.

roid coils, Peerless audio transformers and Chicago power nsformers are used for low noise and distortion with high pendability. Separate low and high frequency boost and attenu- controls, continuously variable to permit stepless adjustment sustained notes. Separate low and high frequency selector tches. In-Out Key switches equalizer in and out without nges in level, or clicks. **Shelf Boost:** 20, 30, 60 and 100 cps, 0 to 5 db. **Peak Boost:** 3, 4, 5, 8, 10, 12, and 16 kc—0 to 18 db. **Shelf enuate:** 20, 30, 60 and 100 cps—0 to 17.5 db; 5, 10 and 20 kc— o 16 db. **Noise:** 92 db below +10 dbm. **Distortion:** 0.15% at 0 dbm. **Loss:** None. Insertion loss restored by amplifier. **Input Load Impedances:** 600, 250 and 150 ohms, balanced/unbal- ed. **Circuit:** Push-pull, transformer in and out, 20 db feedback. **bes:** 1-ECC-82, 1-ECC-83, 1-6X4. **Power:** 25 watts, 117 v., 60 cps. **Size:** 5¼" x 19"; 7¾" deep behind panel. Net Weight, lbs.

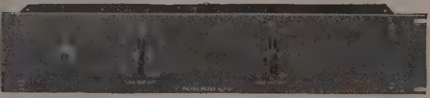
ltec Model EQP-1A—Balanced. Input and Out- both transformer, 600/250/150 ohms. Net Each $475.00

MAVEC MIKE AMPLIFIER AND VARIABLE EQUALIZER

ualizes individual mike channel, correcting microphone, studio performer deficiencies. Supplied, connected for 30 db gain, 250 ns in, feed 600 ohm load, unless other requested. **Peak Boost:** , 5, 8 and 16 kc, continuously variable from 0-13 db of boost. **k Attenuate:** 10 kc attenuate curve variable to 16 db of cut. **Boost:** 60 cps curve variable to 0 to 10 db of boost. **Low enuate:** Four curves effective in reducing vocal microphone miness and studio rumble and in creation of special sounds. **Cut:** 4 curves effective in reducing vocal sibilance. **Output:** 0 dbm to 600 ohms with less than 0.5% harmonic distortion. **quency Response:** 20 cps to 20 kc, +0%, −1 db from 1 kc erence. **Power Required:** (Self contained), 35 watts, 117 v., 60 cps. **Size:** 3½" x 19" x 7⅜" deep behind panel. Finished in e-gray enamel. Net Weight, 11 lbs.

ltec Model MAVEC—Net Each.................... $395.00

ODEL HLF-3C PROGRAM-SOUND EFFECTS FILTER



very wide range program and sound effects filter designed for sical and dramatic presentations. Removes rumble and hum, s and harmonic distortion with a minimum loss of content. As a nd effects filter it includes many most useful frequencies for ects as: telephone conversations, midget radios, sounds from uter space" etc. Shielded toroid coils cut hum. Switches are kless. "Off" position on each selector provides full frequency nsmission. A key switch permits pre-set low and high filter ections to be thrown in and out of circuit on cue. **Low Cut-Off:** F, 50, 80, 100, 150, 250, 500, 750, 1000, 1500, and 2000 cps. **gh Cut-Off:** 1.5, 2, 3, 4, 5, 6, 8, 10, 12, 15 kcs and OFF. **Imped- ce:** 500-600 ohms input and output; space to mount trans- mers for others. **Input Level;** −70 dbm +28 dbm. **Insertion ss:** Zero. **Power Required:** None. **Circuit:** Constant K. **Size:** " x 19", standard rack panel; 7½" depth behind panel. Finished blue-gray baked enamel with engraved dials. Net Weight, lbs.

ltec Model HLF-3C—Net Each.................... $268.00

MODEL MB-1 MICROPHONE AMPLIFIER

ree-stage, high-gain, low-noise preamplifier or program booster nplifier for broadcast, recording, and laboratory use. Gain con- uously adjustable from 28 db to 48 db by changing a resistor ross pair of terminals to adjust feedback. Provides 42 db nega- e feedback at minimum gain, 22 db at maximum. **Tubes:** ECC-82, 1-ECC-83, 1-6X4 rectifier. **Output Noise:** Equivalent to put signal −120 dbm or lower, −72 dbm at maximum gain. **stortion:** Less than 0.5% total harmonic 50-20,000 cps, and less an 1% at 30 cps with output level of +20 dbm into 600 ohms. **puts:** 50, 150 CT, 300, and 600 CT ohms. Input transformer has ectrostatic and 90 db magnetic shielding; may be operated loaded unloaded for extra 6 db gain. **Outputs:** 50, 150, 300, and 600 ms. **Frequency Response:** ±0.5 db with loaded input trans- mer. **Panel Size:** Standard 3½" x 19" rack mount; 7¾" deep. eight 10 lbs.

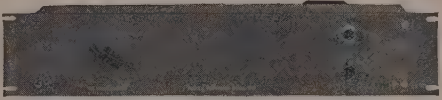
ltec Model MB-1—Net Each........................ $178.00

MODEL EQH-2 PROGRAM EQUALIZER

Has 16 db of boost or attenuation on the high frequency curves. Low frequency curves provide up to 13.5 db of boost and 17 db of attenuation. Separate boost and attenuate controls permit boosting on any high frequency while attenuating on the 10 kc curve. Continuously variable controls allow variation of the amount of equalization, even on sustained tones, without steps in level, or noise. Key permits cutting the equalizer in or out on cue. **Shelf Boost:** 30, 60 and 100 cps—0 to 13.5 db. **Peak Boost:** 3, 5, 8, 10 and 12 kc—0 to 16 db. **Shelf Attenuate:** 30, 60 and 100 cps—0 to 17 db; 10 kc—0 to 16 db. **Distortion:** 0.15% at +10 dbm into 600 ohms. **Noise:** 87 db below +10 dbm. **Response:** Flat, 20-20,000, +0, −1 db. **Loss:** None. Insertion loss restored by amplifier built-in following passive equalizer. Toroid coils, Peerless audio and Chicago power transformers are used for low noise and distortion with high dependability. **Tubes:** 1-ECC-82, 1-ECC-83, 1-6X4. **Power:** 117 v., 50/60 cps. 25 watts. **Panel Size:** 3½" x 19"; 7¾" deep behind panel. Panel finished in blue-gray baked enamel; standard EIA rack mounting. Net Weight, 12 lbs.

Pultec Model EQH-2—Low Impedance. Transformer Input and Transformer Output: 600/250/150 ohms. Net Each.................................... $305.00

RECORDING EQUALIZERS

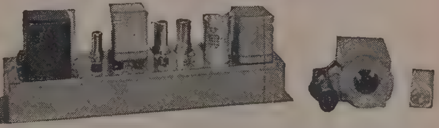


MODEL RE-12 provides five accurately calibrated curves for correct high frequency pre-emphasis in disc recording systems. **Compensation Above Crossover:** Flat (compensator off), 8 db boost, 10 db boost, RIAA, and 16 db boost (corresponds to old NAB standard). Passive equalizer is followed by quality amplifier to restore the network loss. **Inputs:** 600 ohms or 10,000 ohms unbalanced. **Outputs:** 50, 150, 300, and 600 ohms. Designed to provide output level of −10 dbm to 0 dbm for excellent signal-to-noise ratio, plus plenty of peak handling capacity with full 16 db pre-emphasis. **Response:** Uniform ±1.0 db from 20 cps to 20,000 cps with selector switch in "off" (flat) position. Mounts on standard 3½" x 19" rack panel. Weight, 10½ lbs. **MODEL RE-23** provides high frequency pre-emphasis for disc recording. Strap terminals for 10, 12, RIAA or 16 db. **Insertion Loss:** 23 db. **Impedance:** 500-600 ohms. **Size:** 2¾" x 3⅛" x 3⅜" h.

Pultec Model RE-12 (Illus.)—Net Each............. $235.00

Pultec Model RE-23—Net Each......................**$48.00**

MODEL PC-10 RECORD COMPENSATOR



Accurate playback compensation for precise reproduction of phonograph records with any magnetic cartridge. Has self-contained power supply. Available with either 5-position control box, or fixed plug-in equalizers. Features input matching transformer, plus stage of tube gain ahead of compensation network to make equalization independent of cartridge L-C-R characteristics. Accommodates all low impedance (ESL, Fairchild, etc.), and high impedance (GE, Pickering, etc.) cartridges. Cartridge may be easily changed at any time. Gain control, plus vernier controls to boost or attenuate 4 db at 30 cps and 5 db at 10,000 cps to correct for particular cartridge used. **Equalization:** Control box has built-in equalizers for: (1) "Flat" response (flat above 1000 cps, with RIAA compensation below 1000 cps); (2) "European" (old British EMI curve, with 250 cps turnover and 6 db rolloff at 10,000 cps); (3) "RIAA" (modern standard, also identical with New Orthophonic and revised AES and NAB standards); (4) "NAB" (old transcription standard originally adopted in 1942); (5) "Noisy" (like RIAA, but with sharp cut-off above 3500 cps). RIAA and NAB curves within +1 db of official standards at all points, and gain of system at 1 kc varies less than ±1 db for RIAA to other positions. **Frequency Response:** +1 db 30-20,000 cps; −2 db at 20 cps. **Noise:** Better than 60 db below +10 dbm output with RIAA compensation. **Distortion:** 0.5% at +20 dbm into 600 ohms. **Outputs:** 600, 300, 150, and 50 ohms. **Size:** Amplifier, 17" x 5" x 6" high (also available on special order in 5¼" x 19" rack panel); control box, 2½" x 3" x 5¼" high; plug-ins, 1½" x 1½" x 3½" high. **Weight:** Amplifier, 11½ lbs.; control box, 2½ lbs.; plug-ins, ½ lb. each.

Pultec Model PC-10—Amplifier only. Net Each.....	$250.00
Pultec Model C2—Control box for PC-10. Net Each...	**$65.00**
Pultec Model C4—"Flat" plug-in equalizer. Net Each..	**7.50**
Pultec Model C5—"RIAA" plug-in equalizer. Net Each	**7.50**
Pultec Model C6—"European" (EMI) equalizer. Net..	**7.50**
Pultec Model C7—"NAB" plug-in equalizer. Net......	**7.50**
Pultec Model C8—"Noisy" plug-in equalizer. Net Each	**15.00**

Headphones and Accessories

KOSS STEREOPHONIC HEADPHONES

MODEL SP-3 STEREOPHONES

Provide full-range stereophonic sound response through the use of specially constructed 3½" dynamic reproducers. Exceptionally comfortable to wear; soft chamois ear cushions also serve to damp out extraneous ambient sound. Ideal for monophonic as well as stereophonic use. Headset may be connected across the amplifier output directly or across the speaker voice coil leads, preserving the full dimensional effect of stereophonic sound. Reproduces sound with exceptional clarity and tonal realism. Adapters available for 600 and 12,000 ohm impedances, enabling the Stereophones to be used for monitoring purposes. **Frequency Response:** 30-15,000 cps. **Impedance:** 4 ohms. Lightweight.

Koss Model SP-3 Stereophones—Complete with 8-foot cable and plug. Net Each.......................... $\$24^{95}$

MODEL A-1220 AMPLIFIER

Specially designed for use with Stereophones; may be connected directly to a stereophonic ceramic cartridge or to the preamplifier outputs of a stereophonic recorder or tuner. Equipped with two stereophonic jacks, a gain control for each channel and two input jacks. Compact and attractive, this unit lends itself to a variety of uses. Power supply uses transformer circuitry for safety and dependability. **Tubes:** 3, plus one rectifier.

Koss Model A-1220 Amplifier—Net Each........... $\$29^{95}$

ACCESSORIES

Koss Model T-5—Junction box to connect existing stereophonic or monophonic system to the Stereophones. Contains volume controls for changing the level of the phones and for balancing purposes. Two output jacks. Impedance, 4-16 ohms. Net Each........ $\$5^{95}$

Koss Model T-7 Junction box constructed to plug directly into portable phono's or tape recorders having two plug-in side wing speakers. Two output jacks and a speaker on/off switch provided. Net Each........ $\$5^{95}$

Koss Model T-8—Same as above except has RCA type phone jacks for use with such units as the Symphonic. Net Each........ $\$5^{95}$

Koss Model T-1—Contains matching transformers for monitoring 600-10,000 ohm output. Two output jacks are provided for Stereophones. May be connected to tape decks, etc. Net Each........ $\$5^{95}$

PERMOFLUX HEADSETS AND ACCESSORIES

"DIMENSI-FONE" TYPES

The extended frequency response range of these headphones compares with that of a good hi-fi speaker system. Free of distortion.

Model HDB-16-16 Binaural Headset—Impedance, 16/16 ohms. Shpg. Wt., 1 lb. Net Each.. $\$40^{00}$

Model B-DHS-17 Binaural Headset—Impedance, 300/300 ohms. Shipping Weight, 1½ lbs. Net Each............... $\$50^{00}$

Model B-DHS-28 Binaural Headset—Impedance, 12/12 ohms. Shpg. Wt., 1½ lbs. Net Ea.. $\$45^{00}$

Above models have five-foot cord with PL-68 plug.

Model DHS-17 Monophonic Headset—Impedance, 600 ohms. Shipping Weight, 1½ lbs. Net Each.......... $\$45^{00}$

Model DHS-28 Monophonic Headset—Impedance, 25 ohms. Shipping Weight, 1½ lbs. Net Each.......... $\$40^{00}$

Model HDA-8 Monophonic Headset—Impedance, 8 ohms. Shipping Weight, 1 lb. Net Each............. $\$35^{00}$

Model HDA-60 Monophonic Headset—Impedance, 600 ohms. Shipping Weight, 1 lb. Net Each............. $\$40^{00}$

Above models have five-foot cord with PL-55 plug.

TELEPHONE PICKUP TYPES

Model M-53 Headset—For #300 Series phone. Shipping Weight, ½ lb. Net Each........ .... $12.50

ACCESSORIES

Model AD-10 Adapter—Binaural input jack to monophonic plug. Shipping Weight, ½ lb. Net Each....................$3.75

Model AD-11-2 Binaural Adapter—One input jack to two plugs. Shipping Weight, 1 lb. Net Each...................$10.00

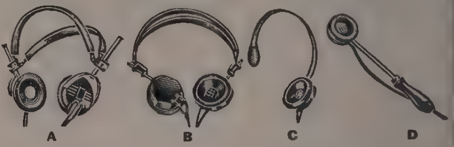
Model 1505 Earcushion—De luxe chamois. Shipping Weight, 3 oz. Net Pair..................................$6.00

Model AD-1 Monophonic Adapters—Impedance matching: 8 ohms to 600 ohms. Net Each.......................... $7.50

Model AD-2 Monophonic Adapters—Impedance matching: 80 ohms to 20,000 ohms. Net Each........................$7.50

Model AD-3 Monophonic Adapters—Impedance matching: 600 ohms to 8 ohms. Net Each...........................$7.50

CLEVITE "BRUSH" CRYSTAL HEADSETS



MODEL BA-206 HI-FI PHONES (FIG. A)

For listening to tape recordings, records and FM broadcasts. Snug-fitting earphones exclude extraneous interference. Special "Metalseal" crystal provides humidity protection. **Frequency Response:** Exceptionally flat, 50-10,000 cps. **Impedance:** 50,000 ohms at 1 kc. **Sensitivity:** 8 dynes/cm²/volt at 1 kc. **Crystal:** "Metalseal" "Bimorph". **Weight:** Shipping, 2 lbs.; Net, 8 oz.

Brush Model BA-206—Net Each.................................. $\$24^{75}$

Brush Model BA-206B—With binaural cord.* Net Each $26.15

MODEL BA-220 HI-FI PHONES (NOT ILLUS.)

Completely redesigned headphone combines the performance of Model BA-206 with the flexibility of a high fidelity instrument. Single cord permits freedom of head movement while listening. A simple change in the plug is required for stereophonic or monophonic listening. Ear cushions furnished improve low frequency response as well as damping extraneous sound and providing greater ear comfort. **Frequency Response:** 50-10,000 cps. **Impedance:** 50,000 ohms at 1 kc. **Sensitivity:** 8 dynes/cm²/volt at 1 kc. **Crystal:** "Metalseal" "Bimorph". Cord and headband, light gray; earphones, jet black. **Weight:** Shipping, 2 lbs.; Net, 8 oz.

Brush Model BA-220—Net Each.................. $\$29^{95}$

MODEL BA-205 EXTENDED RANGE DOUBLE PHONES (FIG. B)

Features controlled frequency response for use in sound measurements, monitoring, audiometry, etc. **Frequency Response:** 50-8,000 cps. **Impedance:** 100,000 ohms at 1 kc. **Sensitivity:** 3 dynes/cm²/volt at 1 kc. **Crystal:** "Bimorph". **Weight:** Shipping, 2 lbs.; Net, 6 oz.

Brush Model BA-205—Net Each.................. $\$22^{50}$

Brush Model BA-205B—With binaural cord.* Net Each $23.85

*Impedance is double that of regular model.

MODEL BA-200 GENERAL PURPOSE DOUBLE PHONES (FIG. B)

Rugged construction for dependable performance under all conditions. Especially suitable for general lab and studio work. **Frequency Response:** 100-5,000 cps. **Impedance:** 45,000 ohms at 1 kc. **Sensitivity:** 6.3 dynes/cm²/volt at 1 kc. **Crystal:** "Bimorph". **Weight:** Shipping, 2 lbs.; Net, 6 oz.

Brush Model BA-200—Net Each.................. $\$15^{00}$

Brush Model BA-200B—With binaural cord.* Net Each $16.35

*Impedance of binaural models is double that of regular models.

MODEL BA-201 GENERAL PURPOSE SINGLE PHONE (FIG. C)

Designed for easy use, especially for group hearing aid and radio-TV applications, when listener wishes to hear both audio signals and surrounding sounds. **Frequency Response:** 100-5,000 cps. **Impedance:** 90,000 ohms at 1 kc. **Sensitivity:** 6.3 dynes/cm²/volt at 1 kc. **Crystal:** "Bimorph". **Weight:** Shipping, 1 lb.; Net, 3 oz.

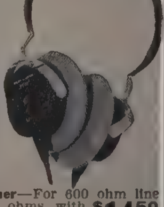
Brush Model BA-201—Net Each..................... $\$9^{95}$

MODEL BA-202 GENERAL PURPOSE LORGNETTE PHONE (FIG. D)

For individual group listening. **Frequency Response:** 100-5,000 cps. **Impedance:** 90,000 ohms at 1 kc. **Sensitivity:** 6.3 dynes/cm²/volt at 1 kc. **Crystal:** "Bimorph". **Weight:** Shipping, 1 lb.; Net, 5 oz.

Brush Model BA-202—Net Each.................. $\$12^{50}$

BEYER MODEL DT-48 HEADSET



Extremely wide, smooth frequency of these earphones enables them to be used for high fidelity listening. Sensitivity and extreme dynamic range of these earphones without measurable distortion, makes them ideal for monitoring high quality signals, even under conditions of high ambient noise levels. Can be used for acoustical tests and measurements. They are wired so that they may be utilized for stereophonic sound reproduction or can be used monophonically with earphones in series. **Frequency Response:** 20-15,000 cps, down less than 7 db at 15,000 cps. **Impedance:** 5 ohms each side (10 ohms in series); may be bridged across 600 ohms at line level with transformer. Weight, 1 lb.

Beyer Model DT-48—Net Each. $\$69^{00}$

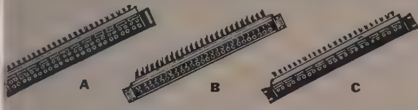
Replacement Foam Rubber Earpieces—Net Each........................$1.40

Beyer Model TR-48 Bridging Transformer—For 600 ohm line monitoring (Ampex output, etc.), 2000/5 ohms, with plugs. Two required for stereophonic use. Net Each.... $\$14^{50}$

acks, Plugs, Cords, VU Meters

AUDIO DEVELOPMENT PLUGS, JACKS, PANELS, CORDS

BROADCAST-TYPE JACK PANELS



ur top quality jack panels for use in television and broadcast .tions, theaters, recording studios, industrial paging systems or y other application requiring efficient switching and distribution audio signals. Panels are constructed of solid bakelite and reinced with steel to provide maximum rigidity and strength. Jacks : spaced to permit use of any standard double plug. Pairs of ies are spaced so that plug cannot be inserted to patch two jacent circuits. Designation strips furnished with each panel. . types will fit standard 19″ relay rack.

uble Panel (Fig. A)—Holds 48 jacks. Requires 2⅛″ rack space.
D.C. Type PJ-31—Double panel, less jacks. Net Each **$ 9.45**
D.C. Type PJ-341—With PJ-318 jacks. Net Each.... **42.75**
uble Panel (Fig. B)—Holds 52 jacks. Double designation strip. quires 1¾″ rack space. All jacks on ⅝″ centers.
D.C. Type PJ-30—Double panel, less jacks. Net Each **$12.90**
D.C. Type PJ-340—With PJ-318 jacks. Net Each.... **49.50**
uble Panel (Not Illustrated)—Same as Types PJ-30 and PJ-340 :ept with standoff brackets to hold the panel 7″ in front of the ay rack.
D.C. Type PJ-35—Double panel, less jacks. Net Each. **$15.60**
D.C. Type PJ-350—Double panel with PJ-318 jacks.
t Each **$52.50**
ngle Panel (Fig. C)—Holds 24 jacks. Requires 1¾″ rack space.
D.C. Type PJ-33—Single panel, less jacks. Net Each.. **$ 8.52**
D.C. Type PJ-343—With PJ-318 jacks. Net Each.... **25.14**

TYPE PJ PANEL JACKS

FIG. 1

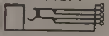


FIG. 2

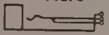


FIG. 3

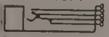


FIG. 4

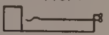


FIG. 5

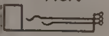


FIG. 6

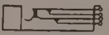


FIG. 7

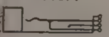


FIG. 8

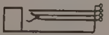
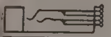
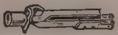


FIG. 9



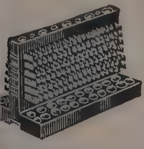


A dependable series of quality jacks. Frame and faceplate are of one-piece construction, with a unique welding arrangement to provide maximum strength and accuracy of alignment. Springs are nickel-silver, with coin silver contacts. Frames are plated and chromate treated to withstand moisture and 50-hour salt spray tests. Tinned connecting lugs. Interchangeable with any telephone jack using a ¼″ plug. Spring arrangements shown in diagrams.

.D.C. Type	Fig.	Net Each	A.D.C. Type	Fig.	Net Each	A.D.C. Type	Fig.	Net Each
J-116†	1	$0.90	PJ-203†	7	$0.84	PJ-226†	...	$1.02
J-318†	2	.69	PJ-115†	8	.90	PJ-237†	...	.87
J-125†	3	1.02	PJ-339*	9	.96	PJ-336†	...	1.14
J-123†	4	.63	PJ-240*	...	1.23	PJ-338†	...	1.23
J-238*	5	.72	PJ-241*	...	1.02	PJ-418†	...	.72
J-117†	6	.90	PJ-242*	...	1.23	PJ-210‡	...	2.76

or use with all 3-conductor plugs. †For use with all 2-conductor ugs. ‡Twin jack (WE-410A).

TERMINAL BLOCKS



High quality terminal blocks for jack panel wiring, rack wiring, etc. Molded of black phenolic plastic. Polished finish on molded parts for easy removal of accidental solder flash after wiring and soldering operation. Each terminal block provides 20 terminals per row, and rows of terminals are graduated in length for ease of wiring. Identification numbers are stamped along top row. Terminals are 0.040″ plated brass. Base dimensions: 3″ wide x 6¹⁄₁₆″ long. Available with one to six rows of terminals.

.D.C. Type	No. of Rows	Total Terminals	Net Each	A.D.C. Type	No. of Rows	Total Terminals	Net Each
-101	1	20	$3.45	PJ-104	4	80	$7.05
-102	2	40	4.65	PJ-105	5	100	8.25
-103	3	60	5.85	PJ-106	6	120	9.45

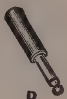
TYPE PJ-5 PHONE PLUG (FIG. D)

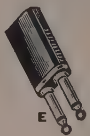
rugged, high quality, two-conductor phone plug. Interchangeole with standard models—fits ¼″ phone jacks. Designed for easy sembly and cord replacement. Installed for 500 v. rms breakown. Black phenolic handle threads into terminal. Solder connecnnections. Equivalent to PL55, WE47. Shpg. Wt., 3 oz.
.D.C. Type PJ-5—Net Each........................... **78c**

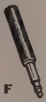
TYPE PJ-1 DOUBLE PHONE PLUG (FIG. E)

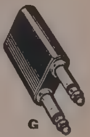
win telephone type three-conductor plug, designed for heavy ıty. Rugged and dependable. Sturdy, die cast frame. Brass stems ıd other machined parts precision made from the finest mateıls. Phenolic shell notched to provide polarizing identification. quivalent to WE241. Shipping Weight, 4 oz.
.D.C. Type PJ-1—Net Each........................... **$2.76**

PHONE PLUGS AND JACKS


D


E


F


G

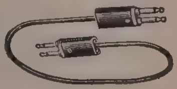
TYPE PJ-3 PHONE PLUG (FIG. F)

Dependable three-circuit plug, equivalent to Western Electric type WE-310. Designed for use with ¼″ tip, ring, and sleeve jacks. Molded insulation withstands 500 v. rms test. Has red shell.
A.D.C. Type PJ-3—
Net Each.. **$2.40**

TYPE PJ-6 DOUBLE PHONE PLUG (FIG. G)

Twin-type plug, equivalent to Western Electric type WE-213. For applications requiring two separate three-conductor circuits; handles six conductors altogether. Popularly used with operator's intercom-monitor headsets. Black shell, notched for polarity identification. Insulated for 500 v. rms. Plug prongs are on ¹¹⁄₁₆″ centers.
A.D.C. Type PJ-6—Net Each.............................. **$9.78**

PATCH CORDS



Patch cord and two PJ-1 double plugs and two PJ-5 single plugs or two PJ-3 single plugs. High quality tinned copper, 2-conductor wire. Heavy braided cover, reinforced for 6″ at each end. Plugs notched for polarizing identification. Shipping Weight, 9 oz.

Length	Cord, PJ-1 Plugs	Net Each	Cord, PJ-5 Plugs	Net Each	Replacement Cords	Net Each
6 in.	PJ-10½	$7.08	PJ-50½	$3.48	PJ-20½	$1.11
1 ft.	PJ-11	7.26	PJ-51	3.63	PJ-21	1.50
2 ft.	PJ-12	7.41	PJ-52	3.84	PJ-22	1.65
3 ft.	PJ-13	7.59	PJ-53	4.11	PJ-23	1.74
4 ft.	PJ-14	7.86	PJ-54	4.44	PJ-24	1.80
5 ft.	PJ-15	8.07	PJ-55	4.77	PJ-25	1.89
6 ft.	PJ-16	8.43	PJ-56	5.25	PJ-26	2.49
10 ft.	PJ-10	8.94	PJ-50	5.82	PJ-20	3.15

A.D.C. Type PJ-82—Two-foot cord with PJ-3 plug. Net..**$8.70**
A.D.C. Type PJ-62—Replacement cord for PJ-82. Net... **2.10**
A.D.C. Type PJ-84—Four-foot cord with PJ-3 plug. Net. **9.30**
A.D.C. Type PJ-64—Replacement cord for PJ-84. Net... **2.40**
A.D.C. Type PJ-86—Six-foot cord with PJ-3 plug. Net... **9.90**
A.D.C. Type PJ-66—Replacement cord for PJ-86. Net... **2.82**

ASSEMBLY PRODUCTS VU METERS

- **CONFORMS TO AMERICAN STANDARD C16.5-1954 SPECIFICATIONS**
- **TWO SIZES**
- **TWO FACE TYPES**

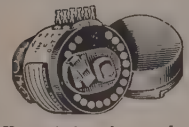
Handsome VU meter in a striking modern design. Especially suited for use in all audio frequency transmission systems, including AM and FM radio broadcasting, television, telephone and recording equipment. Also ideal for measuring noise levels in laboratories. Unique housing exposes only the indicating area; the remaining area of the meter is mounted behind the panel. In effect, the dial is 30% larger than comparable units, yet the meter takes up 15% less panel space. For additional visual comfort, the dials of these meters are tilted back 6° so that glare is reflected upward. Meters may be illuminated from behind the panel through a strip of translucent plastic across the top of the dial section. Dial has buff-colored background that provides less glare than white and also enhances your panel by its contrast. Meter reads zero VU, or 100%, with application of 1.228 volts through a 3600-ohm resistor; this represents 4 db above 1 milliwatt into 600 ohms. **Meter Faces:** Specify when ordering: Type B, as illustrated; or Type A, same except −20 to 0 to +3 db readings are at bottom of the scale in red; 0 to 100% at top in black. **Meter Sizes:** Available in 5″ x 2⅞″ or 3½″ x 2″ sizes.

API Model 561—5″ meter; specify A or B scale. Net Each **$25.00**

API Model 361—3½″ meter; specify A or B scale.
Net Each.. **$25.00**

API Illuminating Bracket—For use with either Model 361 or 561 VU meters. Net Each.............................. **$1.75**

Daven Attenuators, Potentiometers



LADDER NETWORK 350 SERIES

Twenty step, low impedance controls for PA and broadcast systems. Accuracy of resistance: ±5%. Unequal impedances designed having minimum loss for ladder network: Insertion loss: Six db for 1:1 impedance ratio and two db for 1:2 impedance ratio. Contact spacing 15° between centers. Dimensions: 1¾" dia., 1¾" back of panel depth. Mounts in single hole to clear ⅜" bushing. Wt., 6 oz. **$11.33***

LA-350 Series—Net Each.....

LA-351, LA-352 Series—Net Ea. **$12.00***

Dials and Knobs—Net Each..... **$2.25**

Daven No.	Decibels Per Step	Characteristic	Decibel Total
LA-350	2.0	Tapered	Infinite
LA-351	1.5	Linear	Infinite
LA-352	2.0	Linear	Infinite
LA-353	2.0	Linear	40

Daven No.	Terminal Imped.	Daven No.
LA-350-A	30/30	**LA-351-A**
....	30/60	**LA-351-AH**
LA-350-B	50/50	**LA-351-B**
LA-350-BJ	50/100	**LA-351-BJ**
LA-350-C	125/125	**LA-351-C**
LA-350-K	150/150	**LA-351-K**
LA-350-KF	150/500	**LA-351-KF**
LA-350-KG	150/600	**LA-351-KG**
LA-350-D	200/200	**LA-351-D**
LA-350-E	250/250	**LA-351-E**
LA-350-EF	250/500	....
LA-350-F	500/500	**LA-351-F**
LA-350-G	600/600	**LA-351-G**
LA-352A	30/30	**LA-353-A**
LA-352-AH	30/60	**LA-353-AH**
LA-352-B	50/50	**LA-353-B**
LA-352-BJ	50/100	**LA-353-BJ**
LA-352-C	125/125	**LA-353-C**
LA-352-K	150/150	**LA-353-K**
LA-352-KF	150/500	**LA-353-KF**
LA-352-KG	150/600	**LA-353-KG**
LA-352-D	200/200	**LA-353-D**
LA-352-E	250/250	**LA-353-E**
LA-352-F	500/500	**LA-353-F**
LA-352-G	600/600	**LA-353-G**

"T" NETWORK 330 SERIES

The T-330 attenuator is designed for use as either a mixing or master gain control in broadcasting speech input equipment, sound recording studios and sound projection systems. 30 steps of 1.5 decibel per step, infinite. Type T-350 tapered, T-331 linear. Accuracy of resistance, ±5%.

T-330 Series—Net Each...... **$30.00***

T-331 Series—Net Each...... **30.67***

Dials and Knobs—Net Each..... **$2.25**

Daven No.	Terminal Imped.	Daven No.
T-330-A	30/30	**T-331-A**
T-330-B	50/50	**T-331-B**
....	125/125	**T-331-C**
T-330-K	150/150	**T-331-K**
T-330-KF	150/500	**T-331-KF**
T-330-KG	150/600	**T-331-KG**
T-330-D	200/200	**T-331-D**
T-330-E	250/250	**T-331-E**
T-330-F	500/500	**T-331-F**
T-330-G	600/600	**T-331-G**

VU METER MULTIPLIERS

Provide 20 steps of attenuation, 2 db per step, when used as a VU meter attenuator. VU meters, when used as program monitors, are bridged by a 600-ohm line with an attenuator and fixed resistor inserted between the line and the meter, as an isolating network to extend the meter range and reduce meter distortion. **$36.67***

Net Each (any type below)....

Dials and Knobs—Net Each..... **$2.25**

Daven No.	DB Range	Impedance
TA-1000-1*	1 mw +4 to +40 and off	7100/3900
TA-1000-2†		7500/3900
TA-1000-3♯		6900/3900
TA-1000-4*	+4 to +42 and off	7100/3900
TA-1000-5§		3900/3900
TA-1000-6†		7500/3900

*Zero adjust rheostat required; Type 991. †No zero adjust rheostat needed. ♯Zero adjust rheostat needed; Type 991-2. §External 3600 ohm series resistor needed.

"T" NETWORK 345 SERIES

Forty-five steps; tapered on last steps to cutoff (infinity); detents not attached. Accuracy, ±5%. Diameter, 2¾", back-of-panel depth, 2 1/16". Two 8-32 holes for mounting; removable cover. Provide appreciable total attenuation in relatively small steps. Circuit is "Bridged T". To order cueing position, change desired model number to "TQ-". **$40.00***

Net Each (any type below)....

Dials and Knobs—Net Each..... **$2.25**

Daven No.	Decibel Per Step	Characteristic	Decibel Total
T-345	0.5	Tapered	Infinite
T-346	0.75	Tapered	Infinite
T-347	1.0	Tapered	Infinite

Daven No.	Terminal Imped.	Daven No.
T-345-B	50/50	**T-346-B**
T-345-C	125/125	**T-346-C**
T-345-K	150/150	**T-346-K**
T-345-KF	150/500	**T-346-KF**
T-345-KG	150/600	**T-346-KG**
T-345-D	200/200	**T-346-D**
T-345-E	250/250	**T-346-E**
T-345-EF	250/500	**T-346-EF**
T-345-F	500/500	**T-346-F**
T-345-G	600/600	**T-346-G**
T-347-B	50/50	....
T-347-C	125/125	....
T-347-K	150/150	....
T-347-KF	150/500	....
T-347-KG	150/600	....
T-347-D	200/200	....
T-347-E	250/250	....
T-347-EF	250/500	....
T-347-F	500/500	....
T-347-G	600/600	....

"T" NETWORK 250 SERIES

Accuracy of resistance: ±5%. Insertion Loss: Zero loss for 1:1 impedance ratio and minimum loss for unequal impedance. Contact spacing: 15° between centers. Dimensions: 2¼" dia., 1¾" behind panel. Two holes tapped for 8-32 machine screws, 1½" apart on horizontal center line. 2.0 decibel per step. Type 250 infinite, Type 251, 20. All types 10 steps. Attenuation linear. Any type listed below. **$19.33***

Net Each..................

Dials and Knobs—Net Each..... **$2.25**

Daven Series	Decibel per Step	Characteristic	Decibel Total
T-250	2.0	Linear	Infinite
T-251	2.0	Linear	20
T-252	1.5	Linear	15
T-253	1.0	Linear	10

Daven No.	Terminal Imped.	Daven No.
T-250-B	50/50	**T-251-B**
T-250-K	150/150	**T-251-K**
T-250-D	200/200	**T-251-D**
T-250-E	250/250	**T-251-E**
T-250-F	500/500	**T-251-F**
T-250-G	600/600	**T-251-G**
T-252-B	50/50	**T-253-B**
T-252-K	150/150	**T-253-K**
T-252-D	200/200	**T-253-D**
T-252-E	250/250	**T-253-E**
T-252-F	500/500	**T-253-F**
T-252-G	600/600	**T-253-G**

"T" NETWORK 255 SERIES
20 STEPS

For mounting, two holes tapped for 8-32 machine screws, 1½" apart on the horizontal center line. Diameter, 2¼", back-of-panel depth, 2 1/16". Shipping Wt., 11 oz.

T-255 Series —Net Each...... **$26.00***

T-256, T-257, T-258 Series—Net **26.67***

Dials and Knobs—Net Each..... **$2.25**

Daven Series	Decibel per Step	Characteristic	Decibel Total
T-255	2.0	Tapered	Infinite
T-256	2.0	Linear	Infinite
T-257	2.0	Linear	40
T-258	1.5	Linear	30

"T" NETWORK 255 SERIES (CONTINUED)

Daven No.	Terminal Imped.	Daven No.
T-255-A	30/30	**T-256-A**
T-255-B	50/50	**T-256-B**
T-255-C	125/125	**T-256-C**
T-255-K	150/150	**T-256-K**
T-255-KF	150/500	**T-256-KF**
T-255-KG	150/600	**T-256-KG**
T-255-D	200/200	**T-256-D**
T-255-E	250/250	**T-256-E**
T-255-F	500/500	**T-256-F**
T-255-G	600/600	**T-256-G**
T-257-A	30/30	**T-258-A**
T-257-B	50/50	**T-258-B**
T-257-C	125/125	**T-258-C**
T-257-K	150/150	**T-258-K**
T-257-KF	150/500	**T-258-KF**
T-257-KG	150/600	**T-258-KG**
T-257-D	200/200	**T-258-D**
T-257-E	250/250	**T-258-E**
T-257-F	500/500	**T-258-F**
T-257-G	600/600	**T-258-G**

"T" NETWORK 320 SERIES

The T-320 attenuator is a twenty step "T" type network offered for general sound control applications. This unit has zero initial loss, constant impedance both in and out at all settings of the control and a quiet, rugged, self-cleaning switch for low level control. The series T-320 is offered as a main gain control. The series T-321 is supplied with a taper on the last three steps before cut-off and is an ideal twenty-step mixing control. 2.0 decibels per step, infinite. T-320 attenuator linear, T-321 tapered. Accuracy of resistance ±5%. Insertion loss: Zero for 1:1 impedance ratio and minimum loss for unequal impedance. Net Weight, 12 oz.

T-320 Series—Net Each...... **$26.67***

T-321 Series—Net Each...... **26.00***

Dials and Knobs—Net Each..... **$2.25**

Daven No.	Terminal Imped.	Daven No.
T-320-A	30/30	**T-321-A**
....	50/50	**T-321-B**
T-320-C	125/125	**T-321-C**
T-320-K	150/150	**T-321-K**
T-320-KF	150/500	**T-321-KF**
T-320-KG	150/600	**T-321-KG**
T-320-D	200/200	**T-321-D**
T-320-E	250/250	**T-321-E**
T-320-EF	250/500	....
T-320-F	500/500	**T-321-F**
T-320-G	600/600	**T-321-G**

CP-350 POTENTIOMETERS

Twenty-step potential dividers for use in portable equipment; fit in small mounting space. Carbon type resistors; accuracy, ±5%; 1 27/32" diameter; 1 19/32" depth behind panel; .250" shaft diameter, ⅜-32 thread. To obtain cueing position, change number desired to "CPQ".

CP-354 Type—Net Each...... **$11.33***

Other types listed below. Net.. **12.00***

Dials and Knobs—Net Each..... **$2.25**

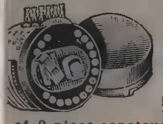
Daven No.	Decibels Per Step	Characteristic	Decibel Total
CP-350	2	Linear	Infinite
CP-352	1.5	Linear	Infinite
CP-353	3	Linear	Infinite
CP-354	2	Tapered	Infinite
CP-355	5	Linear	100

Daven No.	Impedance	Daven No.
CP-350-M	10,000	**CP-352-M**
CP-350-P	20,000	**CP-352-P**
CP-350-R	25,000	**CP-352-R**
CP-350-S	50,000	**CP-352-S**
CP-350-T	100,000	**CP-352-T**
CP-350-W	200,000	**CP-352-W**
CP-350-X	250,000	**CP-352-X**
CP-350-Y	500,000	**CP-352-Y**
CP-353-M	10,000	**CP-354-M**
CP-353-P	20,000	**CP-354-P**
CP-353-R	25,000	**CP-354-R**
CP-353-S	50,000	**CP-354-S**
CP-353-T	100,000	**CP-354-T**
CP-353-W	200,000	**CP-354-W**
CP-353-X	250,000	**CP-354-X**
CP-353-Y	500,000	**CP-354-Y**
CP-355-S	50,000	....
CP-355-T	100,000	....
CP-355-W	200,000	....
CP-355-X	250,000	....
CP-355-Y	500,000	....

★PRICE FOR QUANTITIES OF 1-4, LESS DIAL AND KNOB. ADDITIONAL DISCOUNTS AVAILABLE FOR LARGER QUANTITIES. WRITE FOR DISCOUNT PRICES.

aven Controls, Resistors, Switches

DAVEN NETWORKS AND ATTENUATORS



Most popular attenuators available. Perfect replacements for broadcast and TV speech-input consoles of leading manufacturers. Brass of 2-piece construction reduces ance space required for removal of r. "Lock-Tite" dust cover will not fall nder vibration. Enclosed roller-type nt mechanism for long life, positive king. Low-loss molded terminal board igh resistance to leakage. Rigidly sup-ed resistor strips with air insulation. ee-action" rotor blade is tamper-proof; ides uniform contact pressure and low tance over the life of every unit. Each blade individually supported to give ive contact in operation. Addition tent does not increase depth of unit.

SERIES 825 AND 835 VERTICAL SLIDE ATTENUATORS

r alloy contacts and wiper arms; cheons (dials) available for mounting 3 or 4 units together; dial markings in ; dirt-proof; connector in rear of unit ase of connection or disassembly. Re-able side plate. Knob supplied. Atten-n: 2 db per step; no taper, last step ff (infinity). Series 825, 20-step. Series 30-step. **Size:** 1¼″ w. x 2″ d. x 6″ h.

s **LA-825**— Each, 1-4 . . . . **$23.33**
s **LA-835**—Net, 1-4 . . . . **$30.00**
s **T-825**—Net, 1-4 . . . . **36.67**
s **T-835** -Net, 1-4 . . . . **43.33**
Plate—Net, 1-4. Single . . . . **$3.50**; ble, **$5.50**; Triple, **$10.50**.

Daven No.	Terminal Impedance	Daven No.
LA-825-K	150/150	**LA-835-K**
LA-825-D	200/200	**LA-835-D**
LA-825-E	250/250	**LA-835-E**
LA-825-F	500/500	**LA-835-F**
LA-825-G	600/600	**LA-835-G**
T-825-K	150/150	**T-835-K**
T-825-D	200/200	**T-835-D**
T-825-E	250/250	**T-835-E**
T-825-F	500/500	**T-835-F**
T-825-G	600/600	**T-835-G**

Note: Cueing positions available.

SERIES BAL-255 BALANCED LADDER NETWORKS

For use in circuits where both sides of the line are at equal potential above ground and where space is at a premium. Essentially two small unbalanced ladder networks inserted in each side of the line and coupled together on a common shaft. Twenty steps, 2 db/step, tapered on last steps to cut-off (infinity). No detents on BAL-255 Series; detents attached to BAL-256 Series.

BAL-255 Series—Net Each, 1-4. **$33.33**
BAL-256 Series—Net Each, 1-4. **$34.00**
Dials and Knobs—Net Each **$2.25**

Daven No.	Terminal Imped.	Daven No.
BAL-255-A	30/30	**BAL-256-A**
BAL-255-B	50/50	**BAL-256-B**
BAL-255-K	150/150	**BAL-256-K**
BAL-225-KF	150/500	**BAL-256-KF**
BAL-255-KG	150/600	**BAL-256-KG**
BAL-255-D	200/200	**BAL-256-D**
BAL-255-E	250/250	**BAL-256-E**
BAL-255-EF	250/500	. . . .
BAL-255-F	500/500	**BAL-256-F**
BAL-255-G	600/600	**BAL-256-G**

SERIES LA-220 UNBALANCED LADDER NETWORKS

Smooth control and noise-free operation. Thirty steps; tapered on last steps to cut-off (infinity); no detents. Type LA-220, 1.5 db/step; Type LA-221, 2 db/step.

LA-220 Series— Net Each, 1-4 . . . . **$21.33**
LA-221 Series—Net Each, 1-4. . **$21.33**
Dials and Knobs—Net Each **$2.25**

Daven No.	Terminal Imped.	Daven No.
LA-220-A	30/30	**LA-221-A**
LA-220-B	50/50	**LA-221-B**
. . . .	125/125	**LA-221-C**
LA-220-K	150/150	**LA-221-K**
LA-220-KF	150/500	**LA-221-KF**
LA-220-KG	150/600	**LA-221-KG**
LA-220-D	200/200	**LA-221-D**
LA-220-E	250/250	**LA-221-E**
LA-220-EF	250/250	. . . .
LA-220-F	500/500	**LA-221-F**
LA-220-G	600/600	**LA-221-G**

SERIES T-321 "T" NETWORK

Dependable 20-step mixing control for general sound use. Features zero insertion loss and constant impedance in and out. Ideally suited for low and high level mixing. Unit is supplied with taper for last steps to cut-off (infinity). Attenuation, 2 db per step. No detents.

Daven No. T-321-G—Terminal impedance, 600/600 ohms. Net Each, 1-4 . . . . **$26.00***

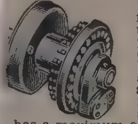
SPECIAL ATTENUATORS

Daven No. SP-4627—Exact replacement for Gates A-9703 with cue, and RCA 147875-2. Net Each, 1-4. **$13.33***

Daven No. SP-4633—Exact replacement for Gates A-9703 and RCA 147875-1. Net Each, 1-4 . . . . . . **$13.33***

***Prices are less dial and knob. Dials and Knobs—Net Each $2.25**

ADJUSTABLE ROTARY STOP SWITCH



Designed for extra flexibility in all types of circuit experimentation, laboratory work, breadboard setups, and circuitry where switch positions might be changed at a later date. has a maximum of 24 positions with spacing, or 32 positions with 11¼° ing. Available in 1-, 2-, 3-, or 4-pole . Sturdy construction with large silver contacts and slip rings; tamper-proof, -action silver alloy rotor blades; high e dielectric with low moisture absorp- and gold flashed turret-type ter-ls for easy soldering. Units meet and ed applicable paragraphs of MIL-S- , MIL-E-5272 and MIL-T-945A on idity, moisture, environment, temper-e cycling, contact resistance, life, ation and shock. **Carrying Capacity:** mps., continuous. **Contact Resistance:** e order of .003 ohm. **Voltage Break-n:** 3000 volts between contacts and ring. **Inter-contact Capacitance:** es from 0.4 µµf to 2.5 µµf, dependent the switch. **Size:** 2⅝″ long (overall), dia.; 1⅜″ mounting centers.

RTING—15° BETWEEN POSITIONS

aven No.	No. Poles	Max. Pos. Per Pole	Net Each
M-24A	1	24	$ 9.90
M-12A	2	12	10.20
M-8A	3	8	10.50
M-6A	4	5	10.80

NON-SHORTING 30° BETWEEN POSITIONS

aven No.	No. Poles	Max. Pos. Per Pole	Net Each
B-12A	1	12	$ 9.90
B-6A	2	6	10.20
B-4A	3	4	10.50
B-3A	4	3	10.80

SHORTING 11¼° BETWEEN POSITIONS

aven No.	No. Poles	Max. Pos. Per Pole	Net Each
M-32A	1	32	$ 9.90
M-16A	2	15	10.20
M-10A	3	10	10.50
M-8A	4	7	10.80

NON-SHORTING 22½° BETWEEN POSITIONS

aven No.	No. Poles	Max. Pos. Per Pole	Net Each
B-16A	1	16	$ 9.90
3-8A	2	8	10.20
B-5A	3	5	10.50
B-4A	4	4	10.80

ENCAPSULATED, PRECISION WIRE-WOUND RESISTORS

Improved design for better performance, miniaturization and lower cost. Units meet MIL-R-9444 and proposed MIL-R-93 specifications. New plastic formulations operate without distortion, "cold-flow", or wire strain in −65° C to +150° C temperatures. Material matches expansion coefficient of wire and terminals for resistance to shock and vibration; withstands salt water immersion and electrolysis. Encapsulating technique permits winding to be completely encased with minimum of pressure on turns; gives maximum resistance in minimum of space. **Type No. 1174:** Lug terminals; ⅝″ long, ½″ dia. MIL type AFRT-18 (MIL-R-9444). Watts, 0.50 max. MIL. Volts, 300 max. MIL. Max. ohms, 1 meg. **Type No. 1250:** Miniature, with axial leads; ¼″ dia., ½″ long. MIL type AFRT-10 (MIL-R-9444) and RB-55A (MIL-R-93B). Watts, 0.125 max. MIL at 125° C. Volts, 400 max. Ohms, 500K max. **Type No. 1195:** Axial leads; ¼″ dia., ¾″ long. MIL type AFRT-11 (MIL-R-9444) and RB-54A (MIL-R-93B). Watts, 0.250 max. at 125° C. Volts, 400 max. Ohms, 1 meg. max. **Standard Tolerance:** ±1% and ±0.5%.

ENCAPSULATED WIRE-WOUND RESISTORS (SPECIFY TYPE NUMBER)

Values, Ohms	Net Each, Lots of		
	1-9	10-24	25-99
.4 ohm thru .99	$3.18	$2.48	$2.07
1 thru 5K	1.49	.95	.81
5,001 thru 10K	1.56	.99	.84
10,001 thru 25K	1.69	1.09	.91
25,001 thru 50K	2.00	1.29	1.08
50,001 thru 75K	2.20	1.41	1.20
75,001 thru 100K	2.32	1.51	1.27
100,001 thru 125K	2.40	1.58	1.32
125,001 thru 150K	2.55	1.69	1.42
150,001 thru 175K	2.72	1.80	1.50
175,001 thru 200K	2.84	1.87	1.58
200,001 thru 250K	3.03	2.04	1.71
250,001 thru 300K	3.35	2.21	1.84
300,001 thru 400K	3.84	2.53	2.10
400,001 thru 500K	4.46	2.94	2.45
500,001 thru 600K	5.11	3.36	2.79
600,001 thru 700K	5.32	3.49	2.90
700,001 thru 800K	5.82	3.82	3.17
800,001 thru 900K	6.16	4.03	3.34
900,001 thru 1 meg.	6.55	4.29	3.56
Add this amount for each add'l meg.	1.97	1.97	1.64

SERIES 850 PRECISION METAL FILM RESISTORS

Entirely new development fills the gap between composition and wire-wound types. Designed for definite and predictable accuracy, small size, low cost and production availability; hermetically sealed. Performance surpasses MIL-R-10509B specifications for allowable change in temperature cycling, low temperature exposure, short time overload, effect of soldering, moisture resistance, voltage coefficient, load life and temperature coefficient. **Temperature Coefficient:** Always positive in value; below +400 PPM/°C; is independent of temperature and is constant throughout operating temperature range; and is independent of resistance value. **Load Life Stability:** Average deviation of 0.3% on typical MIL cycle 1000 hour load life test for ½-watt unit. **Voltage Coefficient:** Negligible; 0.0005% per volt. **Residual Noise:** Has been below 0.040 µv per volt. **Insulation Available:** Add letter **S** to type number for Kel-F (Registered Trademark of M. W. Kellogg Co.) insulated caps for applications where resistors must be mounted close to conducting surfaces; caps increase diameter of unit to a max. of ⅟₃₂″ for type 850. **Size:** ⅝″ long, ³⁄₁₆″ dia. **Max. Rated Volts:** 350. **Standard Tolerance:** ±1%. **Military Type** (MIL-R-10509B); RN20X.

SERIES 850—½ WATT‡

Values, Ohms	Net Each, Lots of		
	1-9†	10-24†	25-99†
1 thru 9	$1.15	$1.00	$0.85
10 to 500K	1.04	.90	.75
500K to 850K	1.15	1.00	.85

‡One- and two-watt sizes also available.
†For Kel-F sleeves add **S** to stock number and **10c** to price.

WRITE FOR DISCOUNTS ON LARGER QUANTITY ORDERS

RECEIVING TUBES

TUBES MAY BE ASSORTED TO OBTAIN QUANTITY PRICES

The tubes listed on these pages represent practically all types generally in demand. As new types are released we will have them immediately available. If a particular type is not listed it is due to space limitations rather than our inability to supply. We invite your orders for all types, whether listed or not. We try to maintain complete stocks at all times but the listing and pricing of a particular tube does not necessarily mean it is available. Average shipping weight per tube, 4 oz. Per 100 tubes, 25 lbs.

TUBE TYPE	LIST PRICE	NET EACH	
		1-49	50 UP
OZ4	$2.15	$1.23	$1.08
OZ4A	2.00	1.14	1.00
OZ4G	2.35	1.34	1.18
1A3	3.05	1.74	1.53
1A5GT	3.20	1.82	1.60
1A7GT	3.70	2.11	1.85
1AX2	3.05	1.74	1.53
1B3GT/1G3GT	2.90	1.65	1.45
1C5GT	3.60	2.05	1.80
1DN5	2.20	1.25	1.10
1G3GT	2.90	1.65	1.45
1G6GT	3.15	1.80	1.58
1H2	3.05	1.74	1.53
1H5GT	3.05	1.74	1.53
1J3	2.90	1.65	1.45
1K3/1J3	2.90	1.65	1.45
1L4	2.65	1.51	1.33
1L6	3.35	1.91	1.68
1LA6	4.10	2.34	2.05
1LB4	4.45	2.54	2.23
1LC6	4.10	2.34	2.05
1LD5	4.25	2.42	2.13
1LE3	4.25	2.42	2.13
1LG5	4.05	2.31	2.03
1LH4	3.95	2.25	1.98
1LN5	3.95	2.25	1.98
1N5GT	3.65	2.08	1.83
1R5	2.55	1.45	1.28
1S2A	3.00	1.71	1.50
1S4	3.65	2.08	1.83
1S5	2.55	1.45	1.28
1T4	2.40	1.37	1.20
1U4	2.35	1.34	1.18
1U5	2.05	1.17	1.03
1V	3 65	2.08	1.83
1V2	2.00	1.14	1.00
1V6	3.90	2.22	1.95
1X2A	3.05	1.74	1.53
1X2B	3.05	1.74	1.53
2A3	6.30	3.59	3.15
2AF4A	4.05	2.31	2.03
2AF4B	4 05	2.31	2.03
2B3	2.90	1.65	1.45
2BN4	2.55	1.45	1.28
2CY5	2.80	1.60	1.40
2EN5	1.85	1.05	.93
2ER5	2.90	1.65	1.45
3A2	3.60	2.05	1.80
3A3	3.40	1.94	1.70
3AF4A	4.05	2.31	2.03
3AL5	1.85	1.05	.93
3AU6	2.15	1.23	1.08
3AV6	1.75	1.00	.88
3B2	6.25	3.56	3.13
3BA6	2.15	1.23	1.08
3BC5	2.30	1.31	1.15
3BE6	2.25	1.28	1.13
3BN4	2.55	1.45	1.28
3BN6	3.05	1.74	1.53
3BU8	2.80	1.60	1.40
3BY6	2.35	1.34	1.18
3BZ6	2.35	1.34	1.18
3CB6	2.25	1.28	1.13
3CF6	2.55	1.45	1.28
3CS6	2.45	1.40	1.23
3CY5	2.85	1.62	1.43
4DE6	2.50	1.43	1.25
3DK6	2.40	1.37	1.20
3DT6	2.20	1.25	1.10
3LF4	4.20	2.39	2.10

TUBE TYPE	LIST PRICE	NET EACH	
		1-49	50 UP
3Q4	$2.75	$1.57	$1.38
3Q5GT	3.60	2.05	1.80
3S4	2.45	1.40	1.23
3V4	2.35	1.34	1.18
4AU6	2.20	1.25	1.10
4BC5	2.35	1.34	1.18
4BC8	4.05	2.31	2.03
4BN6	3.05	1.74	1.53
4BQ7A	4.00	2.28	2.00
4BS8	3.85	2.19	1.93
4BU8	2.80	1.60	1.40
4BZ6	2.25	1.28	1.13
4BZ7	4.05	2.31	2.03
4CB6	2.30	1.31	1.15
4CE5	2.35	1.34	1.18
4CS6	2 35	1.34	1.18
4CY5	2.85	1.62	1.43
4DT6	2.25	1.28	1.13
4ES8	4.65	2.65	2.33
4EW6	2.35	1.34	1.18
5AM8	3.30	1.88	1.65
5AN8	3.55	2.02	1.78
5AQ5	2.20	1.25	1.10
5AS4A	2.15	1.23	1.08
5AS8	3.45	1.97	1.73
5AT8	3.25	1.85	1.63
5AU4	3.40	1.94	1.70
5AV8	4.05	2.31	2.03
5AW4	2.80	1.60	1.40
5AZ4	2.65	1.51	1.33
5B8	3.90	2.22	1.95
5BE8	3.30	1.88	1.65
5BK7A	3.40	1.94	1.70
5BQ7A	4.00	2.28	2.00
5BR8	3.30	1.88	1.65
5BT8	3.30	1.88	1.65
5BW8	3.40	1.94	1.70
5CG8	3.25	1.85	1.63
5CL8A	3.15	1.80	1.58
5CM8	3.55	2.02	1.78
5CQ8	3.35	1.91	1.68
5CZ5	2.85	1.62	1.43
5DH8	4.05	2.31	2.03
5EA8	3.15	1.80	1.58
5EU8	3.20	1.82	1.60
5J6	2.80	1.60	1.40
5T4	7.95	4.53	3.98
5T8	3.40	1.94	1.70
5U4G	2.00	1.14	1.00
5U4GB	2.10	1.20	1.05
5U8	3.30	1.88	1.65
5V3	3.65	2.08	1.83
5V4G	3.30	1.88	1.65
5V4GA	3.30	1.88	1.65
5V6GT	2.20	1.25	1.10
5W4GT	1.85	1.05	.93
5X4G	2.95	1.68	1.48
5X8	3.30	1.88	1.65
5Y3GT	1.75	1.00	.88
5Y4GT	2.35	1.34	1.18
5Z3	3.05	1.74	1.53
5Z4	4.95	2.82	2.48
6A7	4.65	2.65	2.33
6A8	5.25	2.99	2.63
6A8G	4.75	2.71	2.38
6A8GT	4.75	2.71	2.38
6AB4	2.15	1.23	1.08
6AB5/6N5	3.70	2.11	1.85
6AB7	5.00	2.85	2.50
6AC5GT	4.35	2.48	2.18

TUBE TYPE	LIST PRICE	NET EACH	
		1-49	50 UP
6AC7	$4.65	$2.65	$2.33
6AD7G	5.90	3.36	2.95
6AF3	2.90	1.65	1.45
6AF4	4.00	2.28	2.00
6AF4A	4.00	2.28	2.00
6AF6G	3.60	2.05	1.80
6AG5	2.60	1.48	1.30
6AG7	5.60	3.19	2.80
6AH4GT	3.30	1.88	1.65
6AH6	4.60	2.62	2.30
6AH6V	4.65	2.65	2.33
6AJ4	9.80	5.59	4.90
6AK5	4.20	2.39	2.10
6AK6	2.90	1.65	1.45
6AL5	1.85	1.05	.93
6AL7GT	5.75	3.28	2.88
6AM4	5.90	3.36	2.95
6AM8	3.25	1.85	1.63
6AM8A	3.25	1.85	1.63
6AN4	4.95	2.82	2.48
6AN8	3.50	2.00	1.75
6AQ5	2.15	1.23	1.08
6AQ5A	2.15	1.23	1.08
6AQ6	2.20	1.25	1.10
6AQ7GT	4.00	2.88	2.00
6AR5	2.60	1.48	1.30
6AR8	4.35	2.48	2.18
6AS5	2.40	1.37	1.20
6AS8	3.35	1.91	1.68
6AT6	1.90	1.08	.95
6AT8	3.20	1.82	1.60
6AT8A	3.20	1.82	1.60
6AU4GTA	3.35	1.91	1.68
6AU5GT	4.30	2.45	2.15
6AU6	2.10	1.20	1.05
6AU6A	2.10	1.20	1.05
6AU8	3.50	2.00	1.75
6AU8A	3.50	2.00	1.75
6AV5GA	3.80	2.17	1.90
6AV6	1.65	.94	.83
6AW8A	3.55	2.02	1.78
6AX4GT	2.65	1.51	1.33
6AX4GTA	2.65	1.51	1.33
6AX4GTB	2.65	1.51	1.33
6AX5GT	2.95	1.68	1.48
6AX8	3.50	2.00	1.75
6AZ8	4.20	2.39	2.10
6B8	5.15	2.94	2.58
6BA6	2.00	1.14	1.00
6BA7	3.70	2.11	1.85
6BA8A	3.70	2.11	1.85
6BC4	4.80	2.74	2.40
6BC5	2.30	1.31	1.15
6BC7	3.80	2.17	1.90
6BC8	4.00	2.28	2.00
6BD4A	22.35	12.74	11.18
6BD6	2.30	1.31	1.15
6BE6	2.20	1.25	1.10
6BF5	3.55	2.02	1.78
6BF6	1.80	1.03	.90
6BG6G	6.50	3.70	3.25
6BG6GA	6.50	3.70	3.25
6BH6	2.70	1.54	1.35
6BH8	3.50	2.00	1.75
6BJ6	2.60	1.48	1.30
6BJ7	2.95	1.68	1.48
6BJ8	2.90	1.65	1.45
6BK4	7.50	4.27	3.75
6BK5	3.50	2.00	1.75
6BK7B	3.40	1.94	1.70

RECEIVING TUBES

TUBE TYPE	LIST PRICE	NET EACH 1-49	NET EACH 50 UP
7GTA	$3.95	$2.25	$1.98
4	2.50	1.43	1.25
6	3.05	1.74	1.53
8	2.70	1.54	1.35
5	2.40	1.37	1.20
6GTB/CU6	4.35	2.48	2.18
7A	3.95	2.25	1.98
8	3.30	1.88	1.65
8A	3.30	1.88	1.65
8	3.75	2.14	1.88
8	2.80	1.60	1.40
8	3.20	1.82	1.60
V4	1.85	1.05	.93
V8	3.30	1.88	1.65
7GT	4.00	2.28	2.00
5GA	4.20	2.39	2.10
6	2.35	1.34	1.18
8	2.65	1.51	1.33
6	2.25	1.28	1.13
7	4.00	2.28	2.00
8	4.25	2.42	2.13
	1.85	1.05	.93
	3.00	1.71	1.50
GT	2.90	1.65	1.45
	4.35	2.48	2.18
G	5.10	2.91	2.55
4/EZ81	2.20	1.25	1.10
5	2.50	1.43	1.25
7/EL34	6.70	3.82	3.35
5A	7.50	4.27	3.75
6	2.25	1.28	1.13
6A	2.25	1.28	1.13
6GA	5.80	3.31	2.90
5/6BC5	2.35	1.34	1.18
6	2.55	1.45	1.28
7	2.45	1.40	1.23
8A	3.15	1.80	1.58
8	3.60	2.05	1.80
4	2.80	1.60	1.40
6	3.75	2.14	1.88
8	3.15	1.80	1.58
8A	3.15	1.80	1.58
M6	2.55	1.45	1.28
M7	2.75	1.57	1.38
M8	3.55	2.02	1.78
N7	2.60	1.48	1.30
Q8	3.30	1.88	1.65
6	2.40	1.37	1.20
6	2.35	1.34	1.18
7	2.80	1.60	1.40
U5	2.35	1.34	1.18
U8	3.65	2.08	1.83
K8	3.65	2.08	1.83
5	2.80	1.60	1.40
7	2.95	1.68	1.48
Z5	2.80	1.60	1.40
6	4.35	2.48	2.18
8G	3.70	2.11	1.85
A4	2.70	1.54	1.35
B5	2.60	1.48	1.30
C6	2.75	1.57	1.38
E6	2.45	1.40	1.23
E7	2.95	1.68	1.48
G6GT	2.55	1.45	1.28
K6	2.35	1.34	1.18
N6	6.25	3.56	3.13
N7	3.50	2.00	1.75
Q5	7.65	4.36	3.83
Q6A	4.15	2.37	2.08
S5	2.65	1.51	1.33
T5	2.95	1.68	1.48
T6	2.15	1.23	1.08
T8	3.75	2.14	1.88
5	3.00	1.71	1.50
A7	3.50	2.00	1.75
6EA8	$3.20	$1.82	$1.60
6EB8	3.70	2.11	1.85
6EH5	2.35	1.34	1.18
6EH8	3.20	1.82	1.60
6EM5	3.05	1.74	1.53
6ER5	3.20	1.82	1.60
6ES5	2.80	1.60	1.40
6ES8	4.65	2.65	2.33
6EU8	3.15	1.80	1.58
6EW6	2.30	1.31	1.15
6EX6	5.70	3.25	2.85
6EY6	3.00	1.71	1.50
6F5	3.40	1.94	1.70
6F5GT	3.10	1.77	1.55
6F6	4.00	2.28	2.00
6F6G	3.60	2.05	1.80
6F6GT	3.65	2.08	1.83
6F7	6.65	3.79	3.33
6F8G	5.10	2.91	2.55
6FG6/EM84	2.95	1.68	1.48
6FM8	3.00	1.71	1.50
6FV6	2.75	1.57	1.38
6G6G	4.05	2.31	2.03
6GH8	3.20	1.82	1.60
6H6	3.30	1.88	1.65
6J5	2.95	1.68	1.48
6J5GT	2.55	1.45	1.28
6J6	2.80	1.60	1.40
6J6A	2.80	1.60	1.40
6J7	4.35	2.48	2.18
6J7GT	3.65	2.08	1.83
6K6GT	2.35	1.34	1.18
6K7	4.15	2.37	2.08
6K7GT	3.75	2.14	1.88
6K8	4.45	2.54	2.23
6L5G	3.05	1.74	1.53
6L6	6.70	3.82	3.35
6L6G	4.20	2.39	2.10
6L6GB	4.20	2.39	2.10
6L6GC	4.20	2.39	2.10
6L7	4.80	2.74	2.40
6N7	4.35	2.48	2.18
6N7GT	4.35	2.48	2.18
6P5GT	2.80	1.60	1.40
6Q7	3.70	2.11	1.85
6Q7GT	3.20	1.82	1.60
6R7	3.95	2.25	1.98
6R8	3.85	2.19	1.93
6S4A	2.05	1.17	1.03
6S7	4.60	2.62	2.30
6S8GT	2.75	1.57	1.38
6SA7	3.70	2.11	1.85
6SA7GT	3.25	1.85	1.63
6SB7Y	4.95	2.82	2.48
6SC7	3.65	2.08	1.83
6SD7GT	4.05	2.31	2.03
6SF5	2.95	1.68	1.48
6SF5GT	3.20	1.82	1.60
6SF7	4.30	2.45	2.15
6SG7	4.05	2.31	2.03
6SH7	3.85	2.19	1.93
6SJ7	3.55	2.02	1.78
6SJ7GT	3.20	1.82	1.60
6SK7	3.40	1.94	1.70
6SK7GT	3.05	1.74	1.53
6SL7GT	3.30	1.88	1.65
6SN7GTB	2.60	1.48	1.30
6SQ7	3.15	1.80	1.58
6SQ7GT	2.70	1.54	1.35
6SR7	2.95	1.68	1.48
6SS7	3.85	2.19	1.93
6T4	4.35	2.48	2.18
6T7G	3.70	2.11	1.85
6T8A	3.35	1.91	1.68
6U5	3.20	1.82	1.60
6U6GT	5.90	3.36	2.95
6U8A	$3.30	$1.88	$1.65
6V3A	4.35	2.48	2.18
6V6	4.80	2.74	2.40
6V6GT	2.15	1.23	1.08
6W4GT	2.40	1.37	1.20
6W6GT	2.85	1.62	1.43
6X4	1.65	.94	.83
6X5GT	2.05	1.17	1.03
6X8	3.15	1.80	1.58
6Y6G	4.50	2.57	2.25
6Y6GA	3.45	1.97	1.73
6Y6GT	3.45	1.97	1.73
7A4/XXL	3.25	1.85	1.63
7A5	3.85	2.19	1.93
7A6	3.15	1.80	1.58
7A7	3.50	2.00	1.75
7A8	4.45	2.54	2.23
7AD7	6.45	3.68	3.23
7AF7	3.85	2.19	1.93
7AG7	3.85	2.19	1.93
7AH7	3.85	2.19	1.93
7AU7	2.60	1.48	1.30
7B4	3.05	1.74	1.53
7B5	4.75	2.71	2.38
7B6	3.25	1.85	1.63
7B7	3.30	1.88	1.65
7B8	3.55	2.02	1.78
7C5	3.35	1.91	1.68
7C6	3.30	1.88	1.65
7C7	3.05	1.74	1.53
7E5	4.05	2.31	2.03
7E7	4.45	2.54	2.23
7EY6	3.00	1.71	1.50
7F7	3.65	2.08	1.83
7F8	4.60	2.62	2.30
7G7	4.00	2.28	2.00
7H7	3.90	2.22	1.95
7J7	5.15	2.94	2.58
7K7	4.45	2.54	2.23
7L7	4.25	2.42	2.13
7N7	3.40	1.94	1.70
7Q7	4.10	2.34	2.05
7R7	5.15	2.94	2.58
7S7	4.75	2.71	2.38
7V7	4.65	2.65	2.33
7W7	4.75	2.71	2.38
7X7/XXFM	5.85	3.33	2.93
7Y4	2.75	1.57	1.38
7Z4	2.75	1.57	1.38
8AU8	3.55	2.02	1.78
8AU8A	3.55	2.02	1.78
8AW8A	3.70	2.11	1.85
8BA8A	3.65	2.08	1.83
8BH8	3.55	2.02	1.78
8BN8	2.95	1.68	1.48
8BQ5	2.45	1.40	1.23
8CG7	2.50	1.43	1.25
8CM7	2.85	1.62	1.43
8CN7	2.60	1.48	1.30
8CS7	2.95	1.68	1.48
8CX8	3.70	2.11	1.85
8EB8	3.80	2.17	1.90
9AU7	2.60	1.48	1.30
9BR7	2.65	1.51	1.33
8EM5	3.10	1.77	1.55
9CL8	3.15	1.80	1.58
9U8A	3.30	1.88	1.65
10C8	4.25	2.42	2.13
10DE7	2.95	1.68	1.48
11CY7	3.00	1.71	1.50

RECEIVING TUBES CONTINUED
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Electronic RECEIVING TUBES

TUBE TYPE	LIST PRICE	NET EACH	
		1-49	50 UP
12A4	$2.55	$1.45	$1.28
12A6	4.35	2.48	2.18
12A8GT	4.75	2.71	2.38
12AB5	2.45	1.40	1.23
12AC6	2 20	1.25	1.10
12AD6	2.40	1.37	1.20
12AE6	2.05	1.17	1.03
12AE7	3.55	2.02	1.78
12AF3	2.90	1.65	1.45
12AF6	2.35	1.34	1.18
12AF6A	2.25	1.28	1.13
12AH7GT	3.80	2.17	1.90
12AJ6	2.05	1.17	1.03
12AL5	1.90	1.08	.95
12AL8	4.25	2.42	2.13
12AQ5	2.60	1.48	1.30
12AT6	1.85	1.05	.93
12AT7	3.05	1.74	1.53
12AU6	2.15	1.23	1.08
12AU7	2.45	1.40	1.23
12AU7A	2.45	1.40	1.23
12AV5GA	3.85	2.19	1.93
12AV6	1.65	.94	.83
12AV7	3.20	1.82	1.60
12AW6	3.00	1.71	1.50
12AX4GTA	2.70	1.54	1.35
12AX4GTB	2.70	1.54	1.35
12AX7	2.55	1.45	1.28
12AY7	5.00	2.85	2.50
12AZ7	2.75	1.57	1.38
12AZ7A	2.70	1.54	1.35
12B4A	2.70	1.54	1.35
12BA6	2.00	1.14	1.00
12BA7	3.95	2.25	1.98
12BD6	2 25	1.28	1.13
12BE6	2.15	1.23	1.08
12BF6	2.10	1.20	1.05
12BH7A	3.05	1.74	1.53
12BK5	3.80	2.17	1.90
12BL6	2.30	1.31	1.15
12BN6	3.05	1.74	1.53
12BQ6GTB/CU6	4.45	2.54	2.23
12BR7	2.60	1.48	1.30
12BV7	3.05	1.74	1.53
12BY7A	3.05	1.74	1.53
12BZ7	3 05	1.74	1.53
12C5/12CU5	2 35	1.34	1.18
12C8	6 20	3.53	3.10
12CA5	2.50	1.43	1.25
12CN5	2.25	1.28	1.13
12CR6	2.40	1.37	1.20
12CT8	4.05	2.31	2.03
12CU6	4.45	2.54	2.23
12CX6	2 50	1.43	1.25
12D4	2.75	1.57	1.38
12DB5	2.75	1.57	1.38
12DE8	3.35	1.91	1.68
12DK7	2.85	1.62	1.43
12DL8	4.05	2.31	2.03
12DQ6A	4.20	2.39	2.10
12DQ7	3 30	1.88	1.65
12DS7	3 40	1.94	1.70
12DT5	3.05	1.74	1.53
12DT8	3.75	2.14	1.88
12DV8	3.55	2.02	1.78
12DZ6	2.55	1.45	1.28
12EA6	2.65	1.51	1.33
12ED5	2.50	1.43	1.25
12EG6	2.30	1.31	1.15
12EH5	2.35	1.34	1.18
12EK6	2.55	1.45	1.28
12EL6	1.75	1.00	.88
12EM6	2.90	1.65	1.45
12EN6	3.05	1.74	1.53
12F8	2.85	1.62	1.43

TUBE TYPE	LIST PRICE	NET EACH	
		1-49	50 UP
12FK6	$2.10	$1.20	$1.05
12FM6	2.05	1.17	1.03
12FQ8	3.25	1.85	1.63
12H6	3.05	1.74	1.53
12J5	3.15	1.80	1.58
12J5GT	2.70	1.54	1.35
12J7GT	4.20	2.39	2.10
12J8	3.30	1.88	1.65
12K5	2.75	1.57	1.38
12K7GT	4.05	2.31	2.03
12K8	5.25	2.99	2.63
12K8GT	4.80	2.74	2.40
12L6GT	2.50	1.43	1.25
12Q7GT	3.30	1.88	1.65
12R5	2.60	1.48	1.30
12S8GT	2.90	1.65	1.45
12SA7	3.70	2.11	1.85
12SA7GT	3.25	1.85	1.63
12SC7	3.65	2.08	1.83
12SF5	3.05	1.74	1.53
12SF7	4.35	2.48	2.18
12SG7	4.05	2.31	2.03
12SH7	4.00	2.28	2.00
12SJ7	3.55	2.02	1.78
12SK7	3.40	1.94	1.70
12SK7GT	3.05	1.74	1.53
12SL7GT	3.75	2.14	1.88
12SN7GT	2.70	1.54	1.35
12SN7GTA	2.70	1.54	1.35
12SQ7	3.15	1.80	1.58
12SQ7GT	2.65	1.51	1.33
12SR7	3.05	1.74	1.53
12SR7GT	2.10	1.20	1.05
12U7	2.50	1.43	1.25
12V6GT	2.15	1.23	1.08
12W6GT	3.00	1.71	1.50
12X4	1.95	1.11	.98
13DE7	3.00	1.71	1.50
13DR7	3.00	1.71	1.50
14A7	3.50	2.00	1.75
14AF7/XXD	3.80	2.17	1.90
14B6	3 30	1.88	1.65
14C7	3.35	1.91	1.68
14F7	3.85	2.19	1.93
14F8	4.60	2.62	2.30
14Q7	4.10	2.34	2.05
14R7	5.15	2.94	2.58
17AX4GT	2.70	1.54	1.35
17BQ6GTB	4.60	2.62	2.30
17C5	2.35	1.34	1.18
17D4	2.75	1.57	1.38
17DE4	2.85	1.62	1.43
17DQ6A	4.25	2.42	2.13
17H3	2.15	1.23	1.08
17L6GT	2.40	1.37	1.20
18A5	4.15	2.37	2.08
18FW6	2.00	1.14	1.00
18FX6	2.15	1.23	1.08
18FY6	1.65	.94	.83
19	3.70	2.11	1.85
19AU4	3.50	2.00	1.75
19AU4GTA	3.45	1.97	1.73
19BG6GA	6.50	3.70	3.25
19J6	3.15	1.80	1.58
19T8	3.35	1.91	1.68
19X8	3.80	2.17	1.90
21EX6	5.55	3.16	2.78
24A	4.15	2.37	2.08
25AV5GA	4.25	2.42	2.13
25AV5GT	4.10	2.34	2.05
25AX4GT	2.90	1.65	1.45
25EK5	3.65	2.08	1.83
25BQ6GTB/25CU6	4.60	2.62	2.30
25C5	2.15	1.23	1.08
25CA5	2.50	1.43	1.25

TUBE TYPE	LIST PRICE	NET EACH	
		1-49	50 UP
25CD6GB	$5.85	$3.33	$2.93
25CN6	5.55	3.16	2.78
25DN6	5.55	3.16	2.78
25EC6	5.70	3.25	2.85
25EH5	2.30	1.31	1.15
25L6	6.40	3.65	3.20
25L6GT	2.25	1.28	1.13
25W4GT	2.70	1.54	1.35
25W6GT	3.10	1.77	1.55
25Z5	2.90	1.65	1.45
25Z6GT	2.90	1.65	1.45
26	4.35	2.48	2.18
27	4 35	2.48	2.18
32ET5	2.20	1.25	1.10
32L7GT	4.10	2.34	2.05
35A5	3.50	2.00	1.75
35B5	2.65	1.51	1.33
35C5	2.15	1.23	1.08
32DZ8	3.10	1.77	1.55
35L6GT	2.40	1.37	1.20
35W4	1 40	.80	.70
35Y4	2.75	1.57	1.38
35Z3	2.75	1.57	1.38
35Z4GT	2.35	1.34	1.18
35Z5GT	1.85	1.05	.93
36AM3	1.50	.86	.75
41	3.50	2.00	1.75
42	3.50	2.00	1.75
43	4.70	2.68	2.35
45Z3	1.95	1.11	.98
47	8.70	4.96	4.35
49	3.00	1.71	1.50
50	5.70	3.25	2.85
50A5	3.95	2.25	1.98
50B5	2.65	1.51	1.33
50C5	2.15	1.23	1.08
50DC4	1.55	.88	.78
50EH5	2.30	1.31	1.15
50L6GT	2.40	1.37	1.20
50X6	3.20	1.82	1.60
50Y6GT	2.95	1.68	1.48
50Y7GT	3.05	1.74	1.53
57	4.35	2.48	2.18
58	4.35	2.48	2.18
70L7GT	10.15	5.79	5.08
71A	5.10	2.91	2.55
75	5.10	2.91	2.55
76	1.80	1.03	.90
77	2.35	1.34	1.18
78	5.10	2.91	2.55
80	2.90	1.65	1.45
81	2.80	1.60	1.40
83	3.25	1.85	1.63
84/6Z4	2.70	1.54	1.35
117L7/M7GT	10.15	5.79	5.08
117N7GT	9.30	5.30	4.65
117P7GT	9.30	5.30	4.65
117Z3	2.50	1.43	1.25
117Z6GT	4.40	2.51	2.20
5642	5.00	2.85	2.50
5879	3.85	2.19	1.93
5881	6.25	3.56	3.13
6973	4.50	2.57	2.25
7025	2.95	1.68	1.48
7027	5.25	2.99	2.63
7027A	5.25	2.99	2.63
7189	3.60	2.05	1.80
7199	3.30	1.88	1.65
EM-81	2.45	1.40	1.23
GZ-34/5AR4	4.50	2.57	2.25

New types will be added as they become available

icture and Hi-Fi Tubes

RCA SILVERAMA®
.L-NEW PREMIUM PICTURE TUBES

RCA Tube Type	Shape	Enve-lope	Face Plate	Focus	Deflec-tion Angle*	List Price
	●	G	Cl.	E	50°	$78.00
	○	G	Cl.	E	......	29.50
	□	G	Tint	E	90°	32.00
4A	○	G	Tint	M	52°	26.50
4A	●	G	Tint	M	50°	34.00
4A	●	G	Tint	M	54°	34.50
4A	○	G	Tint	M	57°	30.00
P4	■	G	Tint	E	90°	37.00
4/14CP4/14EP4	□	G	Tint	M	70°	31.50
4	□	G	Tint	E	70°	33.50
4A	■	G	Tint	E	70°	38.50
4	□	G	Tint	E	90°	37.50
4A	■	G	Tint	E	90°	41.00
4/14ZP4	■	G	Tint	E	85°	37.50
4A	○	M	Tint	M	53°	48.50
4A	○	G	Tint	M	60°	45.50
4B	○	M	T.F.	M	70°	48.00
4/16RP4	□	G	Tint	M	70°	36.50
4A/16RP4A	■	G	Tint	M	70°	40.00
4A	○	G	Tint	M	52°	45.00
4	□	G	Tint	M	70°	36.50
P4A	○	G	Tint	M	70°	45.00
P4/17ATP4	□	G	Tint	E	90°	40.00
P4A/17ATP4A	■	G	Tint	E	90°	44.00
P4	■	G	Tint	E	90°	44.00
4A	□	G	Tint	M	70°	37.00
4B	■	G	Tint	M	70°	41.00
P4	■	G	Tint	E	110°	48.50
P4	■	G	Tint	E	110°	48.50
P4	■	G	Tint	E	90°	44.00
4	□	M	T.F.	M	70°	47.50
P4						52.00
4	□	M	T.F.	E	70°	50.00
4/17RP4	□	G	Tint	E	70°	39.00
4B/17RP4C	■	G	Tint	E	70°	43.00
4/17VP4	□	G	Tint	E	70°	39.50
4A/17VP4B	■	G	Tint	E	70°	44.00
4	□	G	Tint	M	70°	36.50
4A	■	G	Tint	M	70°	41.00
4	□	M	T.F.	E	70°	51.50
4B	○	M	T.F.	M	66°	52.50
4A/20DP4A	□	G	Tint	M	70°	44.00
4D/20DP4C	■	G	Tint	M	70°	48.00
4A/20MP4	□	G	Tint	E	70°	45.50
4D	■	G	Tint	E	70°	50.00
P4/21AMP4A/ BSP4	■	G	Tint	M	90°	49.50
P4A/21ALP4B	■	G	Tint	E	90°	51.50
4	□	M	T.F.	M	70°	60.00
P4/21ATP4A	■	G	Tint	E	90°	52.00
P4/21AVP4	□	G	Tint	E	72°.	49.00
P4A/21AUP4B/ AVP4A/21AVP4B	■	G	Tint	E	72°	53.50
WP4	■	G	Tint	M	72°	49.50
P4	■	G	Tint	E	90°	52.00
P4A	■	G	Tint	E	90°	52.50
P4	■	G	Tint	E	110°	56.00
KP4	■	G	Tint	E	90°	51.00
AP4	■	G	Tint	E	110°	56.00
P4	■	G	Tint	E	110°	56.00
P4						51.00
4A	□	G	Tint	M	70°	46.50
4B	■	G	Tint	M	70°	50.50
4A	□	G	Tint	E	70°	48.00
4C	■	G	Tint	E	70°	52.00
P4	□	M	T.F.	E	70°	62.50
P4	□	G	Tint	M	70°	46.50
P4A	■	G	Tint	M	70°	50.00
P4A	■	G	Tint	E	70°	52.50
4	□	G	Tint	E	70°	47.50
4A	■	G	Tint	E	70°	51.00
4A	□	G	Tint	M	70°	45.50
4B	■	G	Tint	M	70°	49.00
P4/24CP4A/ TP4/24VP4A	■	G	Tint	M	90°	74.50
EP4	■	G	Tint	E	90°	76.00
HP4	■	G	Tint	E	110°	81.50
P4A/24YP4	■	G	Tint	E	90°	77.00

COLORAMA COLOR PICTURE TUBES

RCA Tube Type	Shape	Enve-lope	Face Plate	Focus	Deflec-tion Angle*	List Price
P22	●	G	Cl.	E	45°	160.00
XP22A	●	M	Tint	E	70°	160.00
YP22	●	G	Tint	E	70°	160.00

gle in degrees is horizontal for round tubes and diagonal for angular tubes.

PLANATION OF SYMBOLS: ○, round. □, rectangular. round aluminized. ■, rectangular aluminized. **G**, glass tube. (in "Envelope" column) metal tube. **Cl.**, Clear face plate. , gray or tinted face plate. **T.F.**, tinted and frosted face plate. electrostatic focus type. **M** (in "Focus" column), magnetic s type.

GENALEX HI-FI TUBES

Z729 AF PENTODE

Expressly designed for use in high quality, high gain audio preamplifier and equalizer stages. Internal shield completely surrounds the tube elements. When properly used, the total hum voltage referred to the grid will not exceed 1.5 μv. Can be mounted in any position. Fits standard 9-pin socket.
Genalex Model Z729 Net Each............. $2.95

KT66 OUTPUT TETRODE

Versatile power tetrode for use either tetrode or triode connected. Use as an oscillator up to 30 mc or as RF amplifier. High slope, indirectly heated. Anode designed to dissipate 25 watts continuously. Use singly or push-pull. Interchangeable with 6L6.
Genalex Model KT66—Net Each. $3.50
Genalex Model KT66 Matched Pair—Net Each Pair...**$8.75**

KT88 AUDIO AMPLIFIER

Designed to furnish greatest output with lowest distortion. A more powerful version of the KT66, yet it is smaller. With fixed bias, 100 watt output may be obtained from a pair of KT88's with 560 v. plate supply. Increased plate dissipation (35 watts), together with higher mutual conductance due to larger cathode. Internal construction permits use of higher plate voltage. Fits standard octal socket; same pin connections as 6L6 and KT66 tubes.
Genalex Model KT88—Net Each.......................... $4.95
Genalex Model KT88 Matched Pair—Net Each Pair..**$11.65**

5881

TUNG-SOL
SPECIAL PURPOSE TUBES

EIA T-11 glass envelope. Completely interchangeable with 6L6. Tremendous overload capacity. Plate dis., 23 watts; plate v., 360 v.; screen dis., 3 watts, screen v., 270 v.; filament 6.3 v.
5881 Beam Power Amplifier—Net Each... $3.50
5881 Beam Power Amplifier Matched Pair—
Net Each Pair.......................**$7.85**

6550 PENTODE

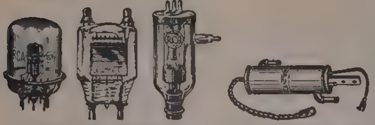
Power amplifier for audio use. 35-watt plate dissipation rating provides for push-pull use up to 100 watts output. Filament, 6.3 v., 1.8 amps., AC/DC; max. plate v., 600 v. DC.
6550 Pentode—Net Each.............................. $4.95
6550 Pentode Matched Pair—Net Each Pair..........**$10.55**

MULLARD PREFERRED RECEIVING TUBES

Mullard Type	EIA Type	Description	Net Ea.
DM70	1M3	Indicator Tube	$1.17
EABC80	6AK8	Triple Diode Triode	2.13
EB91	6AL5	Double Diode	1.05
EBC91	6AV6	Twin Diode Triode	.96
EBF89	6DC8	Duo Diode Pentode	1.95
EC95	6ER5	Frame Grid Triode	2.10
ECC81	12AT7	Double Triode	1.71
ECC82	12AU7	Double Triode	1.41
ECC83	12AX7	AF Double Triode	1.41
ECC85	6AQ8	RF Double Triode	1.56
ECC88	6DJ8	Frame Grid Double Triode	2.64
ECC189	6ES8	Frame Grid Double Triode	2.67
ECF80	6BL8	Triode Pentode	2.28
ECF82	6U8	Triode Pentode	1.89
ECH81	6AJ8	Triode Heptode	2.04
ECL82	6BM8	Triode Pentode	1.80
EF86	6267	AF Pentode	1.50
EF94	6AU6	Pentode	1.20
EF95	6AK5	RF Pentode	2.70
EL34	6CA7	Output Pentode	3.72
EL34*	6CA7	Matched Pair	8.04
EL37	....	Output Pentode	3.45
EL37*		Matched Pair	7.50
EL38	6CN6	Output Pentode	4.08
EL84	6BQ5	Output Pentode	1.38
EL84*	6BQ5	Matched Pair	3.15
EL86	6CW5	Output Pentode	1.71
EL90	6AQ5	Output Pentode	1.29
EM81	6DA5	Tuning Indicator	1.56
EM84	6FG6	Tuning Indicator	1.56
EZ80	6V4	Full Wave Rectifier	.90
EZ81	6CA4	Full Wave Rectifier	1.26
EZ90	6X4	Full Wave Rectifier	.96
GZ34	5AR4	Full Wave Rectifier	2.52
PCC85	9AQ8	RF Double Triode	1.56
PCL82	16A8	Triode Pentode	2.64
PL84	....	Output Pentode	1.38
UCL82	50BM8	Triode Pentode	1.80
UL84	45B5	Output Pentode	1.65
XC95	2ER5	Frame Grid Triode	2.10
7025	7025	AF Double Triode	1.56
7189	7189	Output Pentode	1.74

*Matched pair; when ordering specify matched pair or singles.

RCA Electron Tubes

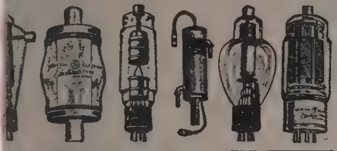


Tube Type	Net Ea.
OA2	$ 1.26
OA2-WA**	3.65
OA3	1.27
OA4-G	1.68
OB2	1.32
OB2-WA**	2.85
OC2	1.40
OC3	1.27
OD3	1.27
1C21	3.85
1EP1	20.50
1EP2	22.85
1EP11	22.85
1L4	1.27
1P21	54.50
1P22	14.75
1P28	27.30
1P29	4.65
1P37	3.75
1P39	2.15
1P40	3.60
1P41	3.80
1P42	13.75
2AP1-A	15.75
2BP1	19.05
2BP11	20.60
2C39-A	22.50
2C39-WA	30.00
2C40	27.50
2C43	24.55
2D21	1.22
2D21-W**	2.80
2E24	5.25
2E26	3.85
2K26	53.00
2X2-A	2.90
3A4	1.20
3A5	1.62
3AP1-A	25.50
3B25	7.75
3B28	6.00
3BP1-A	18.60
3C23	11.98
3C33	23.80
3D22-A	21.25
3E22	8.30
3E29	19.00
3JP1	21.90
3JP7	25.00
3KP1	19.50
3KP4	23.40
3KP7	25.65
3KP11	20.15
3KP16	42.20
3RP1	14.25
3RP1-A	20.75
3RP4	20.00
3WP1	28.80
3WP2	29.50
3WP11	29.50
4-65A	25.00
4-125A/4D21	36.00
4-250A/5D22	46.50
4-1000A	132.00
4C33	235.00
4E27/8001	40.00
4E27A/5-125B	40.00
4X150-A	33.15
4X150-D	33.15
4X500-A	121.00
5ABP1	29.70
5ABP4	39.35
5ABP7	36.40
5ABP11	39.35
5ADP1	28.30
5AHP7	31.85
5AHP7-A	40.75
5AUP24	130.00
5AYP4	58.00
5AZP4	125.00
5BP1-A	29.85
5CP1-A	21.45
5CP7-A	31.50
5CP11-A	36.95
5CP12	31.50
5FP4-A	41.60
5FP7-A	26.35
5FP14-A	27.20
5FP15-A	30.00
5R4-GY	1.90
5R4-GYB	1.90
5UP1	14.25
5UP7	25.75
5UP11	$ 30.30
5WP11	120.00
5WP15	125.00
5ZP16	115.00
6AC7-W*	3.95
6AG7-Y	2.65
6AK6	1.40
6AS6	3.15
6AS7-G	4.45
6AU6-WA**	2.80
6F4	6.25
6J4	3.93
6J4-WA**	5.35
6J6-WA**	6.15
6L4	6.45
6SJ7-Y	1.80
7BP7-A	37.85
7CP1	41.35
7CP4	46.80
7MP7	36.50
7NP4	1025.00
7QP4	39.35
7TP4	62.40
7VP1	28.60
7WP4	1050.00
[illegible]	42.90
9C21	1285.00
9C22♯	1720.00
9C25♯	1280.00
10KP7	50.05
10SP4	74.75
12A6	2.30
12AT7-WA**	2.80
12DP7-A	71.50
12SW7	1.49
12SX7-GT	1.57
12SY7	1.95
16ADP7	100.00
26A6	2.80
26A7-GT	6.45
26C6	2.15
26D6	2.55
83	1.57
105	53.33
172	82.35
207	300.00
217-C	21.17
502-A	2.03
575-A	20.15
579-B	20.50
627	27.00
629	16.50
632-B	36.00
672-A	39.85
673	20.15
676	58.00
677	58.00
800	11.50
801-A	10.90
802	10.90
803	41.80
804	27.20
805	20.10
806	34.25
807	3.00
808	22.85
809	7.40
810	25.65
811-A	6.90
812-A	6.90
813	21.10
814	23.60
815	23.60
816	2.95
826	23.60
827-R	[illegible]00.00
828	27.60
829-B	19.00
830-B	15.75
832-A	15.90
833-A	55.00
834	19.30
836	10.15
837	8.65
838	20.00
841	4.85
845	20.80
857-B	240.00
860	40.25
861	260.00
865	14.75
866-A	2.90
868	3.75
869-B	$ 160.00
872-A	10.65
878	16.70
880	595.00
884	1.85
885	2.00
889-A	235.00
889R-A♯	370.00
891	295.00
891-R♯	460.00
892	290.00
892-R♯	455.00
893-A	748.00
893A-R♯	1260.00
898-A♯	1322.00
902-A	17.95
908-A	22.55
917	5.50
918	4.30
919	5.50
920	6.40
921	3.45
922	3.00
923	3.30
924	3.60
925	3.65
926	3.75
927	3.75
928	5.25
929	2.00
930	3.00
931-A	11.00
931-VA	11.55
934	4.15
935	10.80
954	8.25
955	4.95
956	8.75
957	5.95
958-A	9.75
959	10.50
991	.87
1609	14.50
1612	4.15
1613	2.65
1614	3.77
1616	12.60
1619	4.15
1620	6.99
1621	2.60
1622	3.45
1623	4.05
1624	5.75
1625	4.30
1626	2.20
1629	1.90
1631	3.45
1635	2.37
1818-P1	850.00
1818-P11	1350.00
1818-P27	850.00
1946	13.65
1947	15.10
1949	13.95
1950	10.50
2020	85.00
2022	3.50
2039	41650.00
2041	9000.00
2050	1.85
4009	1755.00
4010	1755.00
4011	1265.00
4011-A	1375.00
5550	49.00
5551-A	65.00
5552-A	99.00
5553-B	245.00
5555	316.00
5556	21.00
5557	9.50
5558	17.50
5559	23.00
5560	33.00
5561	45.75
5563-A	50.00
5581	3.40
5582	5.50
5583	4.90
5584	5.90
5588	190.00
5592♯	1415.00
5604-A	570.00
5618	4.93
5636†	7.80
5639	6.55
5642	2.42
5651	1.78
5651-WA	4.10
5652	6.65
5653	1.95
5654**	3.20
5654/6AK5-W** (MIL-E-1/4-A)	3.20
5654/6AK5-W/ 6096**	4.35
5670**	$ 3.90
5670-WA**	4.35
5671♯	1335.00
5675	14.50
5686**	3.37
5687	4.25
5690	12.95
5691	8.45
5692	8.15
5693	6.40
5696	1.90
5713	270.00
5718†	4.25
5719†	3.85
5725**	3.35
5726**	1.45
5726/6AL5-W**	1.45
5726/6AL5-W/ 6097**	1.45
5727**	2.80
5727/2D21-W**	2.80
5734	18.00
5749**	2.05
5749/6BA6-W**	2.05
5750**	3.45
5751**	2.85
5751-WA**	2.85
5762/7C24	230.00
5763	2.37
5770	995.00
5771	660.00
5786	165.00
5814-A**	3.50
5814-WA**	3.20
5819	56.50
5822	116.00
5822-A	116.00
5823	1.57
5825	20.95
5840†	6.25
5876	14.95
5876-A	20.95
5890	44.00
5893	19.15
5896†	4.45
5899†	6.55
5902§	5.75
5915	1.55
5946	130.00
5963	1.40
5964	1.40
5965	2.37
6005**	3.67
6005/AQ5W**	3.70
6005/6AQ5W/ 6095**	3.70
6012	7.10
6021†	4.80
6026	2.40
6032	122.00
6032-A	130.00
6072**	4.70
6073**	3.00
6073/OA2**	3.00
6074**	3.45
6074/OB2**	3.45
6080	5.25
6080-WA§	11.40
6082	5.30
6099**	13.95
6101**	6.15
6101/6J6-WA**	6.15
6111†	5.45
6112§	5.45
6130/3C45	17.80
6136**	2.75
6146	5.00
6155/4-125A	36.00
6156/4-250A	41.25
6159	5.00
6173	13.70
6186/ 6AG5-WA**	3.55
6189/ 12AU7-WA**	3.70
6197	2.80
6198‡	220.00
6198-A‡	230.00
6199	52.00
6201**	2.75
6205†	6.40
6206†	8.55
6211	2.40
6217	72.00
6263	19.80
6264-A	19.80
6293	6.40
6328	11.90
6342-A	60.10
6350	2.35
63[illegible]	135.00
6405/1640	7.30
6417	2.37
6472	$ 12.40
6521	545.00
6524	16.00
6562	8.25
6570	9.10
6571	65.00
6626/OA2WA**	4.45
6655-A	60.00
6660/6BA6	1.01
6661/6BH6	1.32
6662/6BJ6	1.26
6663/6AL5	.92
6669/6AQ5-A	1.05
6677/6CL6	1.76
6678/6U8-A	1.57
6679/12AT7	1.46
6680/12AU7-A	1.19
6681/12AX7	1.22
6694-A	5.60
6810-A	225.00
6814	5.90
6816	60.00
6849‡	1425.00
6850	16.00
6861	940.00
6865-A	1525.00
6866	1480.00
6883	5.00
6884	60.00
6887	1.25
6893	4.45
6894	25.00
6895	25.00
6903	370.00
6914	145.00
6914-A	145.00
6929	175.00
6949	22220.00
6952	9770.00
6953	3.00
6957	3.70
7008	1970.00
7029	605.00
7034/4X150A	36.50
7035/4X150D	36.50
7043	4.15
7044	2.95
7046	570.00
7054	1.45
7055	.95
7056	1.10
7057	1.85
7058	1.20
7059	1.60
7060	1.95
7061	1.25
7094	31.95
7102	110.00
7110	1640.00
7111	1640.00
7117	11.90
7163	2.85
7183	1230.00
7200	205.00
7203/4CX250B	46.25
7204/4X250F	46.25
7212	8.40
7213	485.00
7214	510.00
7223	12.75
7224	9.00
7264	265.00
7265	425.00
7270	19.70
7271	19.70
7315	1495.00
7326	410.0
7357	9.15
7358	10.30
7404	370.00
7412	2.15
7448	1115.00
7467	9.00
7536	2.15
8000	26.4
8005	16.2
8008	10.6
8013-A	15.5
8020	24.0
8025-A	21.9
9001	5.1
9002	3.6
9003	5.1
9004	4.6
9005	5.0
9006	2.5
C1K/6014	[illegible]2.9
C3J/5632	[illegible]4.1
C3JA/5684	[illegible]9.8
C6J/5C21	[illegible]8.9
C6JA/5685	[illegible]9.3
C16J/5665	[illegible]6.9
MW-4900	325.0

*"Premium" metal. †"Premium" subminature. ‡Special Market types. §"Premium". **"Premium" miniature. ♯Write for available credits.

General Electric Industrial Tubes

THODE-RAY•5 STAR • MILITARY• POWER • COMMUNICATION • TRANSMITTING



ERAL ELEC- TUBE TYPE	NET EACH
	$ 1.26
/VR75	1.27
G	1.68
	1.32
/VR90	1.65
/VR105	1.27
/VR150	1.27
	850.00
4	2.80
4	3.05
4	1.35
5*	1.55
1L21	25.00
1L31	26.50
1L33	46.00
1L36	18.50
1L38	33 25
1P21	54.50
1P39	2.15
1P40	3.60
*	1.90
1A†	15.75
2B22	23.80
2B23	48.55
1†	19.05
2C39B	32.15
2C40	27.50
2C40A	30.85
2C42	23.45
2C43	24.55
2C46	23.90
1‡	1.25
4‡	5.25
6‡	3.85
2H21	270.00
A‡	2.90
3	627.00
1A†	27.40
3B24W	10.55
1A†	18.60
3C23	11.98
1†	19.50
1†	26.30
3X2500A3	193.00
4-65A	26.50
4-250A/ D22	46.50
4-400A	55.00
4-1000A	135.00
4D21/ -125A	36.00
4X150A	33.15
4X500A	121.00
P24†	130.00
5C24	45.00
1A†	21.45
4A	67.70
GYA‡	1.90
1	14.75
WGTB‡	5.75
7WA	5.70
N5‡	3.75
56‡	3.15
57GA	4.65
J6WB	2.80
4‡	2.85
‡	3.95
7WA	2.85
4WA‡	2.85
7C29	189.50
7D21	511.00
T7WB	2.80
AY7‡	2.42

GENERAL ELECTRIC TUBE TYPE	NET EACH
14UP4	$ 70.00
FG-27A	40.25
28D7	2.55
FG-81A	27.77
83	1.85
FG-97	56.50
FG-98A	71.43
GL-100TH	20.50
FG-105	53.33
FG-154	88.75
FG-172	82.35
GL-207	300.00
GL-242C	15.50
FG-280	78.40
GL-393A	13.25
FP-400	71.45
GL-411	478.75
GL-414	135.00
502A‡	2.03
GL-575A	20.15
GL-592	37.50
GL-627	27.00
GL-672A	39.85
GL-673	20.15
GL-678	47 00
GL-801A	10.90
GL-802	10.90
GL-803	41.80
GL-805	20.10
807‡	3.00
GL-809	7.40
GL-810	25.65
GL-811A	6.90
GL-812A	6.90
GL-813	21.10
GL-814	23.60
GL-815	23.60
GL-816	2.95
GL-828	27.60
GL-829B	19.00
GL-832A	15.90
GL-833A	55.00
GL-836	10.15
GL-837	8.65
GL-838	20.00
GL-845	20 80
GL-851	654.00
GL-857B	218 50
GL-862A	1713.25
GL-866A	2.90
GL-868/PJ-23	3.75
GL-869B	138.00
GL-870A	1982.00
GL-872A/872	9.35
GL-880	565.00
884‡	1.85
GL-889A	221.00
GL-889RA††	347.00
GL-891R	460.00
GL-892	290.00
GL-892R	455 00
GL-898A	1713.25
GL-917	5.50
GL-918	4.30
GL-919	5.50
GL-920	6.40
GL-921	3.45
GL-922	3.00
GL-923	3.30
GL-927	3.75
GL-928	4.60
GL-929	2.00
GL-930	3.00

GENERAL ELECTRIC TUBE TYPE	NET EACH
GL-931A	$ 11.00
1612‡	3.70
1614‡	3.43
GL-1616	12.60
1619‡	3.80
1620	6.36
GL-1672/441	4.50
2050‡	1.85
GL-5513	467.25
GL-5516	7.95
GL-5518	890.00
GL-5544	32.50
GL-5549	653.50
GL-5550/ GL-415	49.00
GL-5551A	65.00
GL-5551A/P	65.00
GL-5552A	99.00
GL-5552A/P	99.00
GL-5553B	245.00
GL-5553B/P	245.00
GL-5554/ FG-259B	195.00
GL-5555/ FG-238B	316.00
GL-5556/PJ-8	21.00
GL-5557/ FG-17	9.50
GL-5558/ FG-32	17.50
GL-5559/ FG-57	23.00
GL-5560/ FG-95	33.00
GL-5561/ FG-104	45.75
GL-5563A	50.00
GL-5564/ GL-507	740.00
GL-5575/100	237.00
GL-5581	3.40
GL-5588	190.00
GL-5593	270.00
5610‡	1.05
GL-5620/ FB-50	22.25
GL-5621/B-6	25 50
GL-5623/B-47	25.00
GL-5625/KC-4	225.00
GL-5626/ FA-15	76.75
GL-5627 FA-16	72.50
GL-5628/ FA-13	56.50
GL-5629/ FA-14	45.50
GL-5630	1620.00
GL-5632/C3J	14.10
5636	7.80
5642‡*	2.42
5651‡	1.78
5654★	2.85
5654/ 6AK5W‡	2.85
5654/6AK5W/ 6096‡	4.35
5662‡	1.45
5663‡	2.10
GL-5665/ C16J	56.90
5670★	3.40
5670WA‡	3.40
GL-5674	209.00
GL-5675	14.50
GL-5681	1780.00
5686‡★	3.40
5687‡	4.25
5687WA‡	8.35
5691‡	8.45
5692‡	8.15
5693‡	6.40

GENERAL ELECTRIC TUBE TYPE	NET EACH
5696‡	$ 1.90
5718★	4.25
5719★	3.85
GL-5720/ FG-33	34.75
5725★	3.35
5725/6AS6W‡	3.35
5726★	1.41
5726/6AL5W‡	1.41
5726/6AL5W/ 6097‡	1.55
5727★	2.70
5727/2D21W	2.70
GL-5728/ FG-67	53.50
GL-5736	170.00
GL-5740/ FP-54	209.00
5749★	2.05
5749/6BA6W	2.05
5750★	3.45
5750/6BE6W	3.45
5751★	2.85
5751WA	2.85
GL-5762/ 7C24	230.00
5763‡	2.37
GL-5779	135.25
GL-5788	476.25
5814A★	3.20
5814WA‡	3.20
GL-5819	56.50
GL-5820	1200.00
GL-5822A	116.00
5823	1.57
5824†	3.60
GL-5830/ FG-41	320.00
5840★†	6.25
5844‡	2.30
GL-5855	70.00
5879‡	1.75
5881‡	3.50
GL-5894	25.00
5896★	4.45
5899★	6.55
5902★	5.75
5963‡	1.40
5964‡	1.40
5965‡	2.20
GL-5973	478.80
6005★	3.70
6005/6AQ5W	3.70
6005/6AQ5W/ 6095‡	3.70
GL-6011/710	13.00
6012	7.10
GL-6014/C1K	12.90
GL-6019	751.75
6021★	4.80
GL-6039	1117.50
6046‡	1.55
6072★	3.90
6080‡	5.25
6087★	5.75
6100/6C4WA★	2.49
6111★	5.40
6112★	5.40
6134	5.70
6135	2.40
6136★	2.80
6137	2.85
6146	5.00
GL-6161	115.00
GL-6166	1020.00

GENERAL ELECTRIC TUBE TYPE	NET EACH
GL-6181	$925.00
GL-6182	2100.00
6189/ 12AU7WA‡	3.70
6201★	2.80
6202★	2.85
6203★	4.10
6205★	6.40
6211‡	2.35
GL-6228/ GL-506	3696.25
GL-6251	2300.00
6265★	4.10
GL-6299	52.50
GL-6346	70.00
GL-6347	104.00
GL-6348	250.00
6360	4.00
6386★	7.40
6397‡	8.30
6414★	6.70
GL-6442	47.02
6463‡	2.05
6485‡	2.05
GL-6511	156.90
GL-6512	259.80
GL-6513	347.00
GL-6514	509.00
GL.6515	806.50
6525‡	2.15
6660/6BA6●	1.05
6661/6BH6●	1 35
6662/6BJ6●	1.30
6663/6AL5●	.95
6669/6AQ5●	1.05
6677/6CL6●	1.85
6678/6U8A●	1.60
6679/12AT7●	1.50
6680/12AU7●	1.20
6681/12AX7●	1.25
GL-6807	29.30
GL-6808	29 40
GL-6809	29 80
6829★	6.10
GL-6856/740	19.40
GL-6857/ 740P	20.10
GL-6858/760	28.90
GL-6859/ 760P	29.40
GL-6860/ C6J/F	29.40
6883	5 45
GL-6897	32.15
GL-6907	27.00
6919‡	1.35
GL-6930/ 635P	14.40
GL-6942	855.00
7025/12AX7	2.90
7036	1.50
7077	28.35
GL-7085/356	600 00
GL-8000	26.45
GL-8002	394.00
GL-8002R	588 00
GL-8005	16 25
GL-8008	9.90
GL-8013A	15 55
GL-8020	24.00
GL-8025A	21 95
9001	5 10
9002	3.60
9003	5.10

THERMOSTAT KITS FOR IGNITRONS

Kit No.	Net Each	Kit No.	Net Each
N-15272AA	$7.30	N-15286AA	$9.30
N-15273AA	5.15	N-15287AA	8.00

*Five-Star Types. ● Communication Types.
‡Special Industrial Receiving Types.
*Subject to F.E.T. †Cathode Ray Types. ††Radiator credit available; write for price.

Sylvania Special Purpose Tubes

Sylvania Tube Type	Net Each
0A2*	$ 1.26
GB-0A2WA‡	3.65
0A3	1.27
0A4G*	1.68
0A5	6.96
0B2*	1.32
0B2WA*‡	2.85
GB-0B2WA‡	2.85
0B3*	1.65
0C3*	1.27
0D3*	1.27
1AD5#	2.13
1B24A*	21.35
1B35A*	8.50
1B37A*	8.80
1B44*	24.55
1B63A*	29.55
1C8#	2.35
1D3#	4.70
1D21/SN4	7.10
1E8#	2.37
C1K/6014	12.90
1P39	2.15
1P40	3.20
1S6#	1.54
1T6#	1.97
1W5#	1.54
2A4G	2.88
2B5#	4.03
2C36	38.72
2C37	39.32
2C39A	22.50
2C39WA	30.00
2C40	27.50
2C41	26.50
2C43	24.55
2C53	12.20
2D21	1.25
2D21W*	2.80
2E24	5.25
2E26	3.85
2E30	2.95
2J42*	144.40
2J42B	171.90
2J42H	151.25
2X2A	2.55
3A4	1.20
3A5	1.62
3ASP1	32.00
3ASP2	32.00
3ASP11	32.00
3B28	6.45
3C23	11.98
3E29	20.25
3WP1	31.65
3WP2	31.65
3WP11	31.65
3X2500F3	198.00
C3J/5632	14.10
C3J/A/5684	19.80
4-65A	25.00
4-125A	36.00
4X150A	38.95
4X150D	38.95
4X150G	54.00
4-250A	41.25
4X250B	42.50
4-400A	48.00
4X500A	121.00
4-1000A	132.00
SN5	12.50
5BTP1	32.00
5BTP2	32.00
5BTP7	33.60
5BTP11	33.60
5R4GY	1.90
5Y3WGTA*‡	4.05
GB-5Y3WGTA‡	4.05
6AD4#	3.50
6AJ5*	4.25
6AK4#	3.10
6AN6*	3.75
6AS6	3.15
6AS7G	4.45
6AU6WA*	2.80
6AU6WB*‡	2.80
GB-6AU6WB‡	2.80
6AZ5#	3.85
6BA4 (RT469)	32.37
6BA5#	4.45
6BF7W*‡	4.20
6BL6*	43.70
6BM6*	66.00
6BM6A*	80.00
6D4*	2.85
C6J/5C21	28.90
C6J/A/5685	29.30
6J4*	3.95
6J4WA*‡	5.35
GB-6J4WA‡	5.35
6J6WA*‡	5.35
6SJ7WGT*‡	2.55
GB-6SJ7WGT‡	2.55
6SL7WGT*‡	3.15
GB-6SL7WGT‡	3.15

Sylvania Tube Type	Net Each
6SN7WGT*‡	$ 2.65
GB-6SN7WGT‡	2.65
6SN7WGTA*‡	4.90
6V6GTY*	1.45
6X4W*	1.60
6X4WA*‡	2.85
GB-6X4WA‡	2.85
6X5WGT*‡	1.55
GB-6X5WGT‡	1.55
7AK7*‡	7.45
GB-7AK7‡	7.45
7F8W*‡	6.35
GB-7F8W‡	6.35
12AT7WA*‡	2.80
12AY7	2.45
28D7*	2.55
28D7W*‡	10.40
GB-28D7W‡	10.40
FG-97	56.50
102A	176.00
141	110.00
142	74.00
148	152.00
199	350.00
212E	210.00
232B	670.00
241B	210.00
250TH	33.00
279A	415.00
298A	1485.00
SA-309	20.00
SA-309A	20.85
322	25.25
S-340	56.00
BW342	27.60
342A	670.00
342AA†	775.00
354†	1750.00
356	635.00
357B	170.00
BW369	25.30
379A	440.00
381	26.50
GB-407A‡	5.90
GB-408A	4.95
S-413	15.00
414	135.00
BW416	21.50
481B	10.90
502A	2.03
TW-534	1375.00
TW-538	3850.00
M562A	1203.15
575A	22.15
579B	18.00
S-597	26.75
S-598	26.75
S-598A	33.35
610	28.00
TW-613	1375.00
TW-620A	2179.40
BW-623	1237.50
624	72.00
627	27.00
628	41.00
629	15.00
632B	33.00
642	17.00
672A	38.00
673	22.15
676	58.00
677	58.00
678	47.00
S-696	23.25
S-706	15.00
801A	9.85
807*	2.85
810	25.55
811A	6.50
812A	6.50
813	22.65
815	23.55
816	2.65
828	27.50
829B	18.90
832A	15.85
833A	47.80
S-836	16.70
837	7.85
S-838	16.70
K839B#	185.00
S840	20.00
K840B#	185.00
K841B#	185.00
845	20.85
857B	235.00
TR860	919.80
866A	2.65
869B	145.00
872A	9.90
880	565.00
884	1.85
885	2.00
891	275.00
891R†	430.00

Sylvania Tube Type	Net Each
892	$ 270.00
892R†	425.00
893A	748.00
893AR†	1260.00
895†	1160.00
895R†	1420.00
921	3.30
922	2.85
923	2.85
927	3.75
929	2.00
930	2.85
931A	10.45
R1111	12.70
R1111M	22.50
R1130B (1B59)	20.40
R1131C	19.20
R1166	19.60
R1169	21.50
GB-1216‡	2.38
GB-1217‡	1.55
1222A	2.45
1229	6.40
1237	9.86
1247	6.00
1273#	1.50
1280#	1.50
1614	3.77
1616	11.35
1620/6J7	6.99
1622	3.15
1624	5.15
2050	1.85
SC2782	420.00
TW-4002	1993.75
TW-4006	2750.00
TW-4007	2475.00
SP-4019	3.09
M4063	1643.00
M4064	1643.00
M4155A	1643.00
TR4159	919.80
M4163	1780.65
M4164	1925.00
R4306	4.35
R4307	4.15
R4330	29.10
R4336	64.20
R4340	60.50
R4350	29.10
5530†	330.00
5530-H†	330.00
5531†	630.00
5541†	500.00
5550/681	49.00
5551A/652	65.00
5552A	99.00
5553B/655	245.00
5555	316.00
5557	9.50
5558	17.50
5559	23.00
5560/FG95	33.00
5575/100	225.00
5576/200	266.00
5604†	570.00
5606	288.00
5619	443.00
5625	225.00
5636*‡	7.80
5636A*‡	7.80
5639*‡	6.55
5639A*‡	6.55
5641*‡	7.55
5641A*‡	7.55
5642#	2.42
5643*‡	9.05
5644*‡	9.90
5644A*‡	9.90
5647*‡	8.65
5647A*‡	8.65
5651	1.78
GB-5654‡	2.85
5654/6AK5W*‡	2.85
5654/6AK5W/6096*‡	4.35
5658	595.00
5666	280.00
5667 (889RA)†	370.00
5668	330.00
5669†	490.00
5670*‡	3.40
GB-5670‡	3.40
5670WA*‡	3.40
5679	1.35
5681†	1875.00
5682†	2625.00
5687	4.25
5691	8.45
5692	8.15
5693	6.40
5713	235.00
5718*‡	4.25
5718A*‡	4.25
5719*‡	3.85

Sylvania Tube Type	Net Each
5719A*‡	$ 3.85
5722*	6.40
GB-5725‡	3.35
5725/6AS6W*‡	3.35
GB-5726‡	1.45
5726/6AL5W*‡	1.45
5726/6AL5W/6097*‡	1.55
GB-5727‡	2.70
5727/2D21W*‡	2.70
5736	190.00
GB-5749‡	2.05
5749/6BA6W*‡	2.05
GB-5750‡	3.45
5751*‡	2.85
GB-5751‡	2.85
5751WA*‡	2.85
5763	2.37
5764	39.32
5765	39.32
5767	44.77
5768	32.37
5789	1031.25
5796	17.25
5814A*‡	3.20
GB-5814A‡	3.20
5814WA*‡	3.20
5820	1200.00
5822A	116.00
5823	1.57
5837	89.00
5840*‡	6.25
5840A*‡	6.25
5845	9.25
5855	70.00
5879	1.75
5881	3.50
5891†	1420.00
5894	24.75
5896*‡	4.45
5896A*‡	4.45
5899*‡	6.55
5899A*‡	6.55
5902*‡	5.75
5902A*‡	5.75
5903*‡	12.35
5904*‡	12.35
5905*‡	14.85
5906*‡	12.35
5907*‡	12.35
5908*‡	19.80
5916*‡	24.75
5930*‡	9.95
GB-5930‡	9.95
5931*‡	6.80
GB-5931‡	6.80
5932*‡	11.30
GB-5932‡	11.30
5933*‡	12.35
GB-5933‡	12.35
5933WA*‡	16.50
5934	20.50
5936†	1145.00
5963*‡	1.40
GB-5963‡	1.40
GB-5964‡	1.40
GB-5965‡	2.00
5966	38.00
5977*‡	6.55
5977A*‡	6.55
5986†	1050.00
5987*‡	11.10
GB-6005‡	3.70
6005/6AQ5W*‡	3.70
6005/6AQ5W/6095*‡	3.70
6011	13.00
6012	7.10
6021*‡	4.80
6021A*‡	4.80
6027 (2J42A)	205.00
6080	5.25
GB-6101‡	5.35
6110*‡	8.05
6111*‡	5.45
6111A*‡	5.45
6112*‡	5.45
6112A*‡	5.45
6135*‡	2.40

Sylvania Tube Type	Net Each
GB-6135‡	$ 2.40
GB-6145‡	8.50
6146	5.00
6159	5.00
6163	28.40
6164	113.45
6166	1020.00
GB-6186‡	3.55
GB-6189‡	3.70
6189/12AU7WA*‡	3.70
6198	230.00
GB-6201‡	2.80
6205*‡	6.40
6205A*‡	6.40
6206	8.55
6206A*‡	8.55
GB-6211‡	2.35
6217	72.00
6256	240.00
6257	252.00
6258	280.00
6308*‡	8.25
GB-6350‡	2.35
6352*‡	9.85
6420	360.00
6421†	425.00
6421-F†	440.00
6422	334.00
6423†	495.00
6423-F†	510.00
6424	455.00
6425†	580.00
6425-F†	600.00
6426	675.00
6427†	830.00
6476	13.37
6481 (RT434)	38.30
6483	3.09
6493	962.50
6496	1271.90
6503	65.82
6550#	4.95
6559	955.65
6576	680.00
6591	17.70
6623	205.00
6696	1090.00
6697†	1310.00
6698	2165.65
6699	1512.50
6752	893.75
6753	962.50
6788*‡	11.95
6799	2956.25
6802	11.43
6807	29.40
GB-6814‡	5.90
6846	3.02
6873	10.59
6874 (M-561)	1443.75
6879 (CT854)	15.49
6880	19.96
GB-6888‡	8.25
6899	84.35
6909 (CT923)	17.54
6910 (CT924)	19.96
6943*‡	12.35
6944*‡	12.35
6945*‡	12.35
6946*‡	12.35
6947*‡	12.35
6948*‡	17.80
7006	1430.00
7007	1120.00
GB-7044‡	2.95
7072	2475.00
7098	1898.85
7137*‡	7.10
GB-7137‡	7.10
7155	17.36
7291	375.00
GB-7327‡	12.45
7503	1898.85
8008	9.90
8020	24.00
9001	5.10
9002	3.60
9003	5.10

GB—Manufactured to Commercial and Industrial specifications. *Military type approval. †Radiato and crate credits apply. Write for prices. ‡Sylvani Gold Brand tubes. #FET included in price.

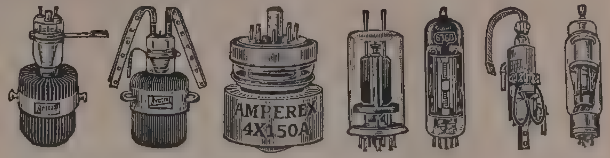
WRITE FOR COMPLETE INFORMATION AND PRICES ON SYLVANIA INDUSTRIAL AND MILITARY CRT'S.

ecial Purpose Electron Tubes

AMPEREX ELECTRON TUBES

PECIAL PURPOSE TUBES

rex	Net Each	Amperex No.	Net Each
	$ 1.75	502	$210.00
	1.75	502R	235.00
A1	2.50	504R	245.00
A2	2.50	575A f	22.15
	1.46	632B	33.00
	160.00	651 k	s
	250.00	652 k	y
	39.50	653B k	(5555)
	8.25	673 f	22.15
	11.98	678 f	47.00
	12.00	805	20.00
	(6268)	807	2.90
	500.00	810	25.55
	270.00	811A	6.50
	270.00	812A	6.50
	270.00	813	22.65
	38.95	828	27.50
*	40.35	829B	18.90
	42.50	832A	14.26
	121.00	833A	55.00
bjk	(GZ34)	834	19.30
	(6279)	838	20.00
j	1.90	845	20.85
	2.10	849	185.00
k	m	849A	185.00
bjk	(EZ81)	857B f	235.00
b	6.20	866AX f	2.65
bz	13.40	869B f	150.00
	4.55	869BL f	150.00
	3.25	872AX f	9.90
	2.50	880	565.00
	3.30	889A	221.00
bk	n	889RA	347.00
bk	p	891	275.00
bk	q	891R	430.00
	16.50	892	270.00
	16.50	892R	425.00
	(OE3)	912NB	53.00
	(OG3)	967 k	(5557)
	2.50	1701 fk	(5557)
	27.00	2050 g	1.85
	27.00	5544 g	38.41
	54.00	5545 g	29.30
	58.00	5551A§	65.00
	54.00	5552A§	99.00
	43.50	5553B*	216.00
	45.50	5555	316.00
	90.00	5557/FG-17	8.50
	90.00	5559	22.00
	95.00	5560/FG-95	33.00
k	(6354)	5586	417.00
	61.00	5604	570.00
	66.00	5619	423.00
	91.00	5651	2.50
	67.00	5654	3.55
	71.00	5657	417.00
	67.00	5658	565.00
	56.00	5666	265.00
	58.50	5667	347.00
	41.00	5685 h	29.30
	43.00	5726	2.10
	41.00	5727 h	2.90
	33.00	5759 k	(501R)
	33.00	5760 k	(502)
	77.00	5761 k	(502R)
	77.00	5771	600.00
	r	5780A	†
	225.00	5822-A‡	116.00



Amperex No.	Net Each	Amperex No.	Net Each
5823 c	$ 2.50	6801	$505.00
5842	20.00	6907	25.00
5847	20.00	6922	4.75
5866	20.00	6939	14.00
5867	30.00	6960	150.00
5868	55.00	6961	210.00
5869	25.00	6972	325.00
5870	100.00	6977	3.50
5894	25.00	6979	42.50
5894*	28.00	7062	2.40
5911 e	(6008)	7092	125.00
5913 e	(6007)	7136	25.00
5920/E90CC	2.00	7189#	3.60
5923	165.00	7316	2.00
5924	231.00	7459	230.00
5924A	275.00	8008AX f	9.90
6007 e	1.50	8020AX j	24.00
6008 e	1.50	AGR9950 k	(5869)
6075	250.00	AGR9951 k	(5870)
6076	305.00	AX105 f	49.50
6077	1675.00	AX260	150.00
6078	1900.00	AX9900 k	(5866)
6079	60.00	AX9901 k	(5867)
6083	14.25	AX9902 k	(5868)
6084/E80F	3.75	AX9903 k	(5894)
6085/E80CC	3.75	AX9904 k	(5923)
6146	5.00	AX9904R k	(5924)
6155	36.00	AX9906 k	(6077)
6156	41.25	AX9906R k	(6078)
6201	4.75	AX9907 k	(6075)
6227/E80L	3.75	AX9907R k	(6076)
6252	25.00	AX9908 k	(6079)
6268 i	32.50	AX9909 k	(6083)
6279 i	45.00	AX9910 k	(6252)
6333	260.00	AX9911 k	(6268)
6339	44.50	AX9912 k	(6279)
6354/150B2	3.00	C3J/5632	15.50
6360	4.00	C3JA/5684	19.80
6370 k	(EIT)	C6J gk	(5685)
6375/DC70e	11.50	DC70 k	(6375)
6445	420.00	DM70/1M3	1.95
6446	305.00	DM71	2.00
6447	465.00	DX122	†
6508 f	80.00	DX123	†
6589	†	DX124	†
6687 k	(E91H)	E81L/6686	5.00
6688	8.00	E83F/6689	4.50
6689 k	(E83F)	E88CC k	(6922)
6693 f	25.00	E91H/6687	1.45
6756	388.00	E92CC	1.75
6757	535.00	E180F k	(6688)
6758	173.00	ECC81# b	3.05
6759	206.00	ECC82# b	2.45
6786	200.00	ECC83# b	2.50
6800	350.00	ECC85# b	2.60

Amperex No.	Net Each	Amperex No.	Net Each
ECC88# b	$ 4.55	EM80#	$ 2.45
ECC91# b	2.80	EM81#	2.45
ECC189	(6ES8)	EM84#	2.95
ECL82#	3.00	EZ80#	1.50
EF86# b	2.75	EZ81# bj	1.60
EFP60 d	8.75	FG17 k	(5557)
EIT/6370	16.50	FG95 k	(5560)
EL34	(6CA7)	FG105 fk	(AX-105)
EL37# b	3.75		
EL37# bz	12.50	GZ34# bj	4.20
EL84# b	2.35	HF200	49.50
EL84# bz	5.25	HF201A	34.50
EL86#	3.50	HF300	40.50
EM34#	3.65	ZB3200	390.00

REFERENCE NOTES

*JAN Type Tubes. #Prices include F.E.T. ‡Plastic coated. †Price on request. **a** UHF Type. **b** Hi-Fi Types. **c** Glow Discharge Miniature Triode. **d** Secondary Emission Pentode. **e** Subminiature Types. **f** Mercury. **g** Xenon. **h** Inert Gas. **i** Hydrogen Generator Types 6268 and 6279 are improved inversions but completely interchangeable in every respect with standard types 4C35 and 5C22 respectively. Minimum guaranteed life of 1000 hours due to the self-contained, self-regulating source of hydrogen. **j** Vacuum. **k** See number in parenthesis for direct replacement type. **m** ECC85. **n** ECC81. **p** ECC82. **q** ECC83. **r** HF-201A. **s** 5552-A. **u** 872AX **y** 5551-A. **z** Matched pair. §Includes sensing plate.

VACUUM CAPACITORS

Amperex Number	Net Each	Amperex Number	Net Each
VC25/20	$22.00	VC100/20	$32.00
VC25/32	25.25	VC100/32	35.00
VC50/20	26.25	VC250/32	75.00
VC50/32	29.50		

RADIATOR CREDIT FOR FORCED AIR-COOLED TUBES

Credit for returned radiator and crate applied when new tube is purchased. Return old tube in original shipping container, both in good condition and prepaid.

Tube	Credit	Tube	Credit	Tube	Credit
889RA	$20.00	5604	$75.00	6447	$30.00
891R	30.00	5667	20.00	6757	75.00
892R	30.00	6445	30.00	6801	75.00

EIMAC SPECIAL PURPOSE TUBES, CONNECTORS

ac Number	Net Each	Eimac Number	Net Each
CA	$ 295.00	3KM4000LT	$ 1,880.00
CG	295.00	3KM50000PA	11,000.00
A	475.00	3W5000A1	210.00
D	475.00	3W5000A3	198.00
K	475.00	3W5000F1	210.00
S	475.00	3W5000F3	198.00
CA	235.00	3X100A5	25.00
CB	235.00	3X2500A3	198.00
	17.25	3X2500F3	198.00
	14.00	3X3000A1	198.00
	16.50	3X3000F1	198.00
	36.00	4-65A	25.00
	40.00	4-125A	36.00
	94.00	4-250A	46.50
A	214.50	4-400A	55.00
	22.50	4-1000A	132.00
WA	30.00	4CN15A	57.65
A	32.00	4CW10000A	625.00
0A	120.00	4CX250B	45.00
0F	140.00	4CX250K	54.00
	15.00	4CX250M	54.00
0A5	32.15	4CX300A	48.00
0A5	32.15	4CX1000A	156.00
0LX	2,360.00	4CX5000A	450.00
0SG	2,950.00	4E27A/5-125B	40.00
0LQ	2,360.00	4K50000LQ	4,560.00
00LA	4,200.00	4KM3000LQ	3,750.00
00LF	4,200.00	4KM50000LA	4,230.00
00LQ	4,200.00	4KM50000LQ	3,760.00
000LA	2,470.00	4KM50000SG	10,000.00

Eimac Number	Net Each	Eimac Number	Net Each
4KM170000LA	$23,500.00	75TL	$ 28.00
4PR60A	90.00	100TH	22.00
4W300B	42.50	100TL	22.00
4W20000A	1,850.00	152TH	75.00
4X150A	38.95	152TL	75.00
4X150D	38.95	250R	30.50
4X150G	54.00	250TH	33.00
4X250B	42.50	250TL	33.00
4X250F	42.50	253	30.00
4X500A	121.00	304TH	60.50
4X500F	230.00	304TL	60.50
6C21	77.00	450TH	77.00
6K50000LQ	8,250.00	450TL	77.00
KY21A	25.00	592/3-200A3	37.50
RX21A	24.00	750TL	137.50
25T	15.00	1000T	137.50
35T	20.00	1500T	245.00
35TG	36.00	2000T	340.00
75TH	28.00	8020/100R	15.00

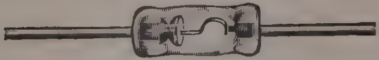
HEAT DISSIPATING CONNECTORS

Eimac Number	Net Each	Eimac Number	Net Each	Eimac Number	Net Each
HR-1	$0.60	HR-5	$0.80	HR-8	$1.60
HR-2	.60	HR-6	.80	HR-9	3.00
HR-3	.60	HR-7	1.60	HR-10	1.60
HR-4	.80				

Diodes, Special Purpose Tubes

RADIO RECEPTOR SUBMINIATURE DIODES

GOLD BONDED GLASS GERMANIUM TYPES



Hermetically sealed, glass germanium diodes. Controlled gold bonding process provides dependable high forward conductance without increasing reverse leakage. Designed for rugged usage. Meet strictest size, moisture, resistance, thermal and electrical stability specifications; subjected to 100% multi-step testing prior to shipping. EIA color coded. Max. Size: .105″ dia., .270″ long. All values measured at 25° C except as noted.

GENERAL PURPOSE TYPES

Radio Recep. No.	Min. Fwd. Ma at 1 v.	Max. Reverse DC μa. and Corresponding Ohms Res. at Indicated Voltages	Max. Inv. Oper. Volts	Net Each
1N67A	4	5(1 meg)@5V; 50(1 meg)@50V	80	$0.80
1N68A	3	625(160K)@100V	100	1.04
1N89	3.5	8(625K)@5V; 100(500K)@50V	80	.75
1N90	5	500(100K)@50V	60	.39
1N95	10	500(100K)@50V	60	.51
1N96	20	500(100K)@50V	60	.56
1N97A	20	8(625K)@5V; 100(500K)@50V	80	.88
1N98A	40	8(625K)@5V; 100(500K)@50V	80	.96
1N99A	20	5(1 meg)@5V; 50(1 meg)@50V	80	1.19
1N100A	40	5(1 meg)@5V; 50(1 meg)@50V	80	1.25
1N116A	10	100(500K)@50V	60	.67
1N117A	20	100(500K)@50V	60	.67
1N118A	40	100(500K)@50V	60	.83
1N128†	3	10(1 meg)@10V	40	.68
1N198†	4	75(133K)@10V; 250(200K)@50V*	80	1.25
DR315	50	50(2 meg)@100V	120	1.80
DR316	50	100(1 meg)@100V	100	1.50
DR317	50	50(1 meg)@50V	80	1.25
DR318	50	2(5 meg)@10V	60	1.80
DR319	50	5(2 meg)@10V	60	1.25

†JAN type. *At 75° C. #Minimum forward current; maximum forward current is 25 ma.

HIGH CONDUCTANCE TYPES

DR301	400	100(500K)@50V	100	$1.32
DR302	400	100(500K)@50V	80	1.22
DR303	400	50(400K)@20V	60	1.12
DR309	400	10(1 meg)@10V; 50(1 meg)@50V	80	1.45
DR327	300	100(500K)@50V	100	1.27
DR328	300	100(500K)@50V	80	1.17
DR329	300	50(400K)@20V	60	1.07
DR330	300	10(1 meg)@10V; 50(1 meg)@50V	80	1.40
DR305	200	100(500K)@50V	100	1.22
1N270	200	100 (500K) @ 50 V	80	1.00
DR307	200	50(400K)@20V	60	1.02
DR308	200	10(1 meg)@10V; 50(1 meg)@50V	80	1.35
1N281	100	30(333K)@10V; 500(100K)@50V	60	.97
DR310	100	50(2 meg)@100V	120	1.85
DR311	100	100(1 meg)@100V	120	1.75
DR312	100	5(2 meg)@10V; 20(5 meg)@100V	100	2.05
DR313	100	2(5 meg)@10V; 20(2.5 meg)@50V	80	1.95
DR314	100	50(1 meg)@50V	80	1.30
DR326	100	250(200K)@50V	60	.76

HIGH TEMPERATURE TYPES

1N198†	5	75(133K)@10V; 250(200K)@50V*	80	$1.25
1N277	100	75(133K)@10V; 250(200K)@50V*	100	1.95
DR321	200	125(400K)@50V*	100	2.40
DR323	100	200(250K)@50V*	80	1.95
DR324	100	500(100K)@50V*	80	1.50

*At 75° C. †JAN type.

WRITE FOR INFORMATION ON COMPUTER TYPES AND OTHER AVAILABLE TYPES.

CONTROLLED LOW FORWARD VOLTAGE DROP TYP FOR TRANSISTORIZED CIRCUITS

Radio Recep. No.	Fwd. Voltage Drop at 10 Ma Min.	Fwd. Voltage Drop at 10 Ma Max.	Max. Inv. Oper. Volts	Max. Rev. DC μa and Resis. Ohms at Voltages	Max. Fwd. DC Ma	Ne Eac
DR385	.34V	.37V	50	10 (1 meg) @ 10V	100	$1.
DR434	.34V	.37V	30	10 (1 meg) @ 10V	100	1.
DR435	.34V	.37V	20	10 (1 meg) @ 10V	100	1.

GENERAL PURPOSE SILICON DIODES

Rated at 25° C unless otherwise noted. Maximum operat temperature −80° C to +200° C, unless otherwise noted.

Radio Recep. No.	Min. Fwd. Ma at 1 v.	Rev. μa DC at Test Volts 25° C	Rev. μa DC at Test Volts 150° C	Test Volts*	Min. Break-down Volts†	Avg. Fwd. DC Ma	Ne Eac
1N456	40	.025	5	25	30	90	$3.1
1N457	20	.025	5	60	70	75	3.6
1N458	7	.025	5	125	150	55	3.9
1N459	3	.025	5	175	200	40	4.1
1N461	15	.5	30	25	30	60	1.2
1N462	5	.5	30	60	70	50	1.8
1N463	1	.5	30	175	200	30	2.2
1N464	3	.5	30	125	150	40	2.0

*Also max. inverse voltage. †Reverse, 100 μa reverse curr

ALL PURPOSE TYPE

Radio Recep. No.	Max. Fwd. Drop at Current Indicated	Rev. μa DC at Test Volts 25° C	Rev. μa DC at Test Volts 150° C	Test Volts	Min. Break-down Volts†	Ne Eac
1N658	1V @ 100 ma	.05‡	25‡	100	120	$4.2

FAST RECOVERY TYPES

Maximum operating temperature −80° C to +150° C.

1N625	1.5V @ 4 ma	1	.....	10	30	$1.6
	....	10	50§	20	......	
1N626	1.5V @ 4 ma	20	100§	35	50	1.9
1N627	1.5V @ 4 ma	20	100§	75	100	2.2
1N628	1.5V @ 4 ma	20	100§	125	150	2.5
1N629	1.5V @ 4 ma	20	100§	175	200	2.8
DR677	1V @ 100 ma	0.5	25§	20	30	2.0
DR672	1V @ 100 ma	0.5	10§	35	50	2.3
DR673	1V @ 100 ma	0.5	10§	75	100	2.7
DR674	1V @ 100 ma	0.5	10§	125	150	3.1
DR675	1V @ 100 ma	0.5	10§	175	200	3.3

HIGH CONDUCTANCE TYPES

1N482	1.1V @ 100 ma	.25	30	30	40	$1.7
1N482A	1V @ 100 ma	.025	15	30	40	2.4
1N482B	1V @ 100 ma	.025	5	30	40	3.4
1N483	1.1V @ 100 ma	.25	30	60	80	2.4
1N483A	1V @ 100 ma	.025	15	60	80	2.9
1N483B	1V @ 100 ma	.025	5	60	80	3.7
1N484	1.1V @ 100 ma	.25	30	125	150	2.8
1N484A	1V @ 100 ma	.025	15	125	150	3.2
1N484B	1V @ 100 ma	.025	5	125	150	4.0
1N485	1.1V @ 100 ma	.25	30	175	200	3.1
1N485A	1V @ 100 ma	.025	15	175	200	3.6
1N485B	1V @ 100 ma	.025	5	175	200	4.5
1N486	1.1V @ 100 ma	.25	50	225	250	3.6
1N486A	1V @ 100 ma	.05	25	225	250	4.3
DR668	1V @ 200 ma	.025	5	60	80	3.7
DR669	1V @ 200 ma	.025	5	125	150	4.
DR670	1V @ 200 ma	.025	5	175	200	4.5
DR671	1V @ 200 ma	.05	25	225	250	4.5

‡At −50 volts. §At 100° C.
†Reverse voltage at which 100 μa reverse current flows.

MVM TELEFUNKEN SPECIAL PURPOSE TUBES

Telefunken Type	List Price	Telefunken Type	List Price
AF3	$4.40	DK96	$3.30
AF7	4.10	DL11	5.10
AL4	3.85	DL41	3.10
AZ1	3.20	DL92/3S4	2.45
AZ11	2.20	DL94/3V4	2.35
AZ12	3.40	DL96	2.70
AZ41	1.45	DM70	2.05
CF7	5.50	DM71	2.05
CL4	6.35	DY80/1X2A	3.05
DAF11	5.25	EAA91/6AL5	1.85
DAF91/1S5	2.55	EABC80/6T8	3.50
DAF96	3.00	EAF42	3.15
DC90	3.00	EB11	3.75
DCH11	5.70	EBC11	4.35
DF11	4.80	EBC41	2.75
DF91/1T4	2.40	EBC91/6AV6	1.65
DF92/1L4	2.90	EBF11	3.60
DF96	3.15	EBF15	3.45
DF97	3.15	EBF80	3.00
DF904/1U4	2.35	EBF83/6DR8	3.90
DK40	4.40	EBF89	3.25
DK91/1R5	2.60	EC92/6AB4	2.25
DK92	3.30	ECC81/12AT7	3.05

Telefunken Type	List Price	Telefunken Type	List Price
ECC82/12AU7	$2.45	EF804	$2.50
ECC83/12AX7	2.55	EFM11	4.80
ECC85	2.70	EH90/6CS6	2.35
ECF12	3.60	EL11	4.75
ECH11	3.90	EL12	6.65
ECH42	3.50	EL13	3.75
ECH81	3.50	EL34/6CA7	6.20
ECL11	6.60	EL41	3.15
ECL80	3.90	EL84/6BQ5	2.60
ECL82	3.25	EL90/6AQ5	2.15
ECL113	3.35	EL95	3.15
EF11	3.30	EM11	3.75
EF12	3.30	EM35	2.50
EF13	3.60	EM71A	5.15
EF14	3.90	EM80	2.60
EF15	3.90	EM81	2.50
EF41	3.00	EY51	4.00
EF80	3.15	EY86	4.00
EF83	3.15	EZ11	3.00
EF85	3.15	EZ12	3.75
EF86	2.60	EZ80	1.50
EF89	3.00	EZ81	2.00
EF93/6BA6	2.05	PABC80	6.00

Telefunken Type	List Price	Telefunken Type	L Pr
PCC84	$4.00	UCF12	
PCC85	3.10	UCH11	
PCF80	4.00	UCH42	
PCF82	3.30	UCH81	
PCL81	4.05	UCL11	
PCL82	4.40	UCL81	
PL36	5.50	UCL82	
PL81	5.25	UF11	
PL82	3.15	UF14	
PL83	3.65	UF15	
PL84	3.20	UF41	
PM84	3.20	UF80	
PY83	2.00	UF85	
UAA11	3.40	UF89	
UAA91	1.80	UL11	
UABC80	3.65	UL41	
UAF42	2.50	UL84	
UBC41	2.75	UM11	
UBF11	3.60	UM35	
UBF15	3.45	UM80	
UBF80	3.40	UY11	
UC92	4.00	UY41	
UCC85	3.65	UY85	

CBS Semiconductor Products

TIC AND GLASS DIODES

	Description	Net 1-99
	General Purpose	$0.45
	Matched Pair	1.80
/B	120 v. Peak Rev. V.	.90
*	225 v. Peak Rev. V.	3.75
	Detector, Gen. Purp.	.33
	General Purpose	.33
	Hi-Back Resistance	.90
	1 Meg. Reverse Resist.	.90
	170 v. Peak Reverse V.	1.87
	High Forward Cond.	.80
	120 v. Peak Reverse V.	.90
	Video Detector	.50
	125 v. Peak Reverse V.	1.27
	Video Detector	.50
	DC Restorer	.53
†	Hi-Back Resis. at Hi-V.	1.07
†	Gen. Purp. Hi. Rev. V.	1.20
*	General Purpose	.48
*	125 v. Peak Reverse V.	.71
	125 v. Peak Reverse V.	.90
*	General Purpose	.87
	UHF Mixer —Silicon	.83
#	UHF Mixer —Silicon	1.15
	General Purpose	.45
	Computer	.60
	General Purpose	.68
	High Voltage	1.02
	High Voltage	1.08
	Hi. Rev. Resist. Hi-V.	1.20
	Hi. Rev. Resist. Hi-V.	1.46
	10 v. High Conductance	1.35
	50 v. Low Impedance	1.20
	Computer	.75
	General Purpose	.75
	General Purpose	.90
†§	General Purpose	.51
†§	General Purpose	1.05
	General Purpose	.80
	Computer, Fast Recov. Time (IBM Type F)	.98
	Computer, Fast Recov. Time (IBM Type G)	.68
	1 meg. Rev. Resis. Hi-T.	1.28
	30 v. Computer	1.43
	35 v. Computer	1.88
	High Temperature	2.25
	35 v. Computer	.90
	75 v. Computer	.90

DIODES (CONTINUED)

CBS Type	Description	Net 1-99
1N283†	20 v. 200 ma Computer	$1.37
1N287†	General Purpose	.80
1N288†	General Purpose	.95
1N289†	High Reverse Resist.	1.35
1N290†	120 v. General Purpose	1.65
1N294†	High Reverse Resist.	.60
1N295†	40 v. Video Detector	.40
1N298†	70 v. Computer	.98
1N447†	General Purpose	1.10
1N448†	Hi. Rev. Resist, Hi-V.	1.44
1N449†	30 v. Low Impedance	1.38
1N450†	100 v. Low Impedance	1.13
1N452†	30 v. High Conductance	2.01
1N453†	100 v. Hi-Conductance	2.46
1N454†	50 v. High Conductance	2.85
1N497†	100 ma @ 1.0 v., 1 meg. @ 20 v.	.75
1N498†	100 ma @ 1.0 v., 1.6 meg. @ 40 v.	.98
1N499†	100 ma @ 1.0 v., 1.6 meg. @ 50 v.	1.28
1N500†	100 ma @ 1.0 v., 1.6 meg. @ 60 v.	1.50
1N541†	45 v. AM and FM Det.	.53
1N631†	60 v. Low Impedance	1.28
1N632†	60 v. Low Impedance	.75
1N633†	90 v. High Conductance	1.58
1N634†	100 v. Low Impedance	1.13
1N636†	1 meg., Rev. Resist., Gen. Purp.	.53
1N699†	Rev. Recovery = 50K +	2.03
1N770†	Rev. (15K @ 0.3 μsec.) Recov. (50K @ 0.5 μsec.)	1.95

*Plastic only. †Glass only. §Available to JAN specifications. Net additional charge of **5c** per unit for source inspection or certificate of compliance. #Plastic type less leads unless specified.

N-P-N HIGH FREQUENCY SWITCHING TRANSISTORS

CBS Type	Description	Net 1-99
2N312	75 mw, 2 mc, Core Driver	$ 6.75
2N356	100 mw, Core Driver	4.73
2N357	100 mw, 6 mc, Core Driver	5.93

N-P-N TRANSISTORS (CONT.)

CBS Type	Description	Net 1-99
2N358	100 mw, Core Driver	$ 8.10
2N377	150 mw, Core Driver	3.00
2N385	150 mw, Core Driver	3.75
2N388	150 mw, 5 mc, Core Driver	5.25
2N438	100 mw, 2.5 mc, Logic Cir.	3.75
2N438A	150 mw, 2.5 mc, Logic Cir.	4.13
2N439	100 mw, 5.0 mc, Logic Cir.	5.25
2N439A	150 mw, 5.0 mc, Logic Cir.	5.78
2N440	100 mw, 10.0 mc, Logic Cir.	7.50
2N440A	150 mw, 10.0 mc, Logic Cir.	8.25
2N444	100 mw, 0.5 mc, Switching	2.25
2N445	100 mw, 2 mc, Switching	3.00
2N446	100 mw, 5 mc, Switching	4.05
2N447	100 mw, 9 mc, Switching	5.40
2N556	100 mw, 1 mc, Core Driver	5.40
2N558	100 mw, 3 mc, Core Driver	5.25
2N634	150 mw, 5 mc, Switching	6.60
2N635	150 mw, 10 mc, Switching	9.00
2N636	150 mw, 15 mc, Switching	10.50
2N1000	150 mw, 7 mc, Core Driver	9.00
2N1012	150 mw, 3 mc, Core Driver	7.20

P-N-P POWER TRANSISTORS

CBS Type	Description	Net 1-99
2N155*	30 v. Auto Radio Transist.	$2.78
2N156†	30 v., 20-watt	3.75
2N157*	60 v., 20-watt	5.25
2N157A*	100 v., 20-watt	9.00
2N158†	60 v., 20-watt	5.25
2N158A†	80 v., 20-watt	6.75
2N235A	50 v., 20-watt	2.78
2N235B	50 v., 20-watt	3.08
2N236A	50 v., 25-watt	3.15
2N236B	50 v., 25-watt	3.75
2N242	45 v., 25-watt	2.78
2N257	40 v., 25-watt	2.95
2N285A	40 v., 25-watt	3.68
2N297	60 v., 25-watt	6.38
2N297A	60 v., 35-watt	4.65
2N301*	30 v., 30-watt	2.73
2N301A*	60 v., 30-watt	4.83

*Diamond case. †Standard case.

CBS No. PA275M Transistor Home Study Course—Ten lessons with correction service. Net Each...... **$25.00**

P-N-P INDUSTRIAL POWER TRANSISTORS

CBS Type	Case *	Description	Net 1-99
	S	80 v., 20-watt	$ 9.00
	S	100 v., 20-watt	12.00
	S	120 v., 20-watt	18.00
	S	150 v., 20-watt	22.50
	S	200 v., 20-watt	30.00
	M	30 v., 20-watt	3.75
	D	30 v., 20-watt	3.75
	F	30 v., 40-watt	4.15
	M	30 v., 20-watt	4.15
	D	30 v., 20-watt	4.15
	F	30 v., 20-watt	4.50
	M	30 v., 20-watt	4.50
	D	30 v., 20-watt	4.50
	M	60 v., 20-watt	5.25
	F	60 v., 20-watt	6.75
	M	60 v., 20-watt	6.75
	D	60 v., 20-watt	6.75
	F	60 v., 20-watt	7.50
	M	60 v., 20-watt	7.50
	D	60 v., 20-watt	7.50
	F	100 v., 20-watt	9.00
	M	100 v., 20-watt	9.00
	F	100 v., 20-watt	10.50
	M	100 v., 20-watt	10.50
	D	100 v., 20-watt	10.50
	F	100 v., 20-watt	12.75
	M	100 v., 20-watt	12.75
	D	100 v., 20-watt	12.75
	F	120 v., 20-watt	12.00
	M	120 v., 20-watt	12.00
	D	120 v., 20-watt	12.00
	F	120 v., 20-watt	16.50
	M	120 v., 20-watt	16.50
	D	120 v., 20-watt	16.50
	F	120 v., 20-watt	22.50
	M	120 v., 20-watt	22.50
	D	120 v., 20-watt	22.50
	F	30 v., 30-watt	3.75
	M	30 v., 30-watt	3.75
	D	30 v., 30-watt	3.75
	F	30 v., 30-watt	5.55
	M	30 v., 30-watt	5.55
	D	30 v., 30-watt	5.55
	F	30 v., 30-watt	6.00
	M	30 v., 30-watt	6.00
	D	30 v., 30-watt	6.00
	F	60 v., 30-watt	4.15
	M	60 v., 30-watt	4.15
	D	60 v., 30-watt	4.15
	F	60 v., 30-watt	6.00
	M	60 v., 30-watt	6.00
	D	60 v., 30-watt	6.00
	F	60 v., 30-watt	6.00
	M	60 v., 30-watt	6.00
LT-5069	D	60 v., 30-watt	$ 6.00
LT-5070	F	80 v., 30-watt	6.00
LT-5071	M	80 v., 30-watt	6.00
LT-5072	D	80 v., 30-watt	6.00
LT-5073	F	80 v., 30-watt	9.00
LT-5074	M	80 v., 30-watt	9.00
LT-5075	D	80 v., 30-watt	9.00
LT-5076	F	80 v., 30-watt	10.50
LT-5077	M	80 v., 30-watt	10.50
LT-5078	D	80 v., 30-watt	10.50
LT-5079	F	100 v., 30-watt	9.00
LT-5080	M	100 v., 30-watt	9.00
LT-5081	D	100 v., 30-watt	9.00
LT-5082	F	100 v., 30-watt	12.75
LT-5083	M	100 v., 30-watt	12.75
LT-5084	D	100 v., 30-watt	12.75
LT-5085	F	100 v., 30-watt	24.00
LT-5086	M	100 v., 30-watt	24.00
LT-5087	D	100 v., 30-watt	24.00
LT-5088	F	30 v., 40-watt	4.50
LT-5089	M	30 v., 40-watt	4.50
LT-5090	D	30 v., 40-watt	4.50
LT-5091	F	30 v., 40-watt	4.85
LT-5092	M	30 v., 40-watt	4.85
LT-5093	D	30 v., 40-watt	4.85
LT-5094	F	30 v., 40-watt	5.40
LT-5095	M	30 v., 40-watt	5.40
LT-5096	D	30 v., 40-watt	5.40
LT-5097	F	60 v., 40-watt	5.25
LT-5098	M	60 v., 40-watt	5.25
LT-5099	D	60 v., 40-watt	5.25
LT-5100	F	60 v., 40-watt	6.75
LT-5101	M	60 v., 40-watt	6.75
LT-5102	D	60 v., 40-watt	6.75
LT-5103	F	60 v., 40-watt	7.50
LT-5104	M	60 v., 40-watt	7.50
LT-5105	D	60 v., 40-watt	7.50
LT-5106	F	80 v., 40-watt	9.00
LT-5107	M	80 v., 40-watt	9.00
LT-5108	D	80 v., 40-watt	9.00
LT-5109	F	80 v., 40-watt	13.50
LT-5110	M	80 v., 40-watt	13.50
LT-5111	D	80 v., 40-watt	13.50
LT-5112	F	80 v., 40-watt	12.75
LT-5113	M	80 v., 40-watt	12.75
LT-5114	D	80 v., 40-watt	12.75
LT-5115	F	100 v., 40-watt	12.00
LT-5116	M	100 v., 40-watt	12.00
LT-5117	D	100 v., 40-watt	12.00
LT-5118	F	100 v., 40-watt	16.50
LT-5119	M	100 v., 40-watt	16.50
LT-5120	D	100 v., 40-watt	16.50
LT-5121	F	100 v., 40-watt	30.00
LT-5122	M	100 v., 40-watt	30.00
LT-5123	D	100 v., 40-watt	$30.00
LT-5125	M	80 v., 30-watt	12.38
LT-5126	M	80 v., 30-watt	12.90
LT-5130	M	80 v., 30-watt	11.55
LT-5131	M	80 v., 30-watt	12.00
LT-5132	M	80 v., 30-watt	11.55
LT-5132A	....	80 v., 30-watt	12.00
LT-5133	M	80 v., 30-watt	13.28
LT-5134	M	80 v., 30-watt	13.88
LT-5135	M	80 v., 30-watt	13.28
LT-5135A	M	80 v., 30-watt	13.88
LT-5136	M	80 v., 30-watt	12.38
LT-5136A	....	80 v., 30-watt	12.90
LT-5152	F	30 v., 20-watt	3.75
LT-5153	F	60 v., 20-watt	5.25

*M—Male; F—Female; D—Diamond; S—Standard.

GLASS-ENCLOSED DIODES

CBS Type	Description	Net 1-99
LD-47	AM Radio Detector	$0.40
LD-70	High Conductance	1.20
LD-71	General Purpose	1.35
LD-123	High Conductance	.53
LD-125	General Purpose	.45
LD-134	Hi-Cond., Hi-Temp.	1.95
LD-141	General Purpose	.68
LD-143	General Purpose	.63
LD-145	High Temperature Video FM and AM Detector	.40

COMPLEMENTARY POWER TRANSISTORS

N-P-N (TO-3 Case)			P-N-P (TO-3 Case)		
EIA 2N-	CBS LT-*	Net 1-99	EIA 2N-	CBS LT-*	Net 1-99
1292	5165	$13.50	1291	5191	$ 5.63
1292L	5165L	16.15	1291L	5191L	8.25
1294	5163	18.00	1293	5192	8.25
1294L	5163L	22.50	1293L	5192L	10.50
1296	5164	25.50	1295	5193	10.50
1296L	5164L	52.50	1295L	5193L	12.75
1298	......	33.00	1297	......	12.75
1298L	......	60.00	1297L	......	13.50
326	......	14.10	1291	5191	5.63

N-P-N (TO-13 Case)			P-N-P (TO-13 Case)		
EIA LT-	CBS 2N-*	Net 1-99	EIA LT-	CBS 2N-*	Net 1-99
5210	102	$ 7.50	5209	101	$ 7.50
5202	144	10.50	5201	143	10.50

Suffix L—For inductive load. *Former type.

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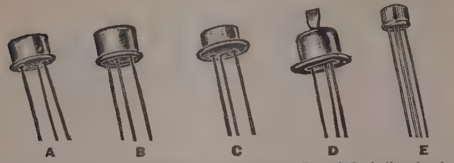
SPECIFY G.E. A wide selection of transistors offering greater stability, switching, more power; plus, a complete range rectifiers with broad application possibilities. For top performance and availability, your best choice is G.E. Semiconducto



Figures A and B, triangular lead; Figures C and D, inline lead; Figure E, square lead.

INDUSTRIAL NPN SILICON TRANSISTORS

G.E. No.	Fig.	Max. Coll. Dissip. @ 25° C (mw)	Min. Break-down Volts	Max. Col-lector Ma	Alpha Cutoff Mc	Net Each 1-99‡
2N333	B	150	45	25	12.0	$16.00
2N334	B	150	45	25	13.0	16.00
2N335	B	150	45	25	14.0	21.40
2N336	B	150	45	25	15.0	23.40
2N337	B	125	45	20	30.0	18.90
2N338	B	125	45	20	45.0	25.60
2N489*	B	450	65	70	0.9	11.20
2N490*	B	450	75	70	0.7	12.00
2N491*	B	450	65	70	0.8	11.75
2N492*	B	450	75	70	0.7	12.40

*PN device.

GERMANIUM TRANSISTORS

IF NPN ENTERTAINMENT TYPES

G.E. No.	Fig.	Max. Coll. Dissip. @ 25° C (mw)	Min. Break-down Volts	Max. Col-lector Ma	Alpha Cutoff Mc	Net Each 1-99‡
2N168A	D	65	15	20	8.0	$2.06
2N169	D	65	15	20	8.0	2.06
2N169A	D	65	25	20	9.0	2.50
2N292	D	65	15	−20	5.0	1.61
2N293	D	65	15	−20	8.0	2.06
2N448	D	65	15 max.	−20	5.0	1.37
2N449	D	65	15 max.	−20	8.0	1.90
2N1121	D	65	15 max.	−20	8.0	2.10

NPN COMPUTER TYPES

2N78*	A	65	15	20	9.0	$ 3.75
2N167	D	75	30	75	9.0	6.45
USAF-2N167†	D	Per MIL-T-19500/11				8.13
2N634	A	150	20	300	8.0	5.00
2N635	A	150	20	300	12.0	6.65
2N636	A	150	15	300	17.0	10.00

*Also used as high frequency amplifier. †Please supply military contract number with order. Price does not include customer source inspection charge.

RF NPN TYPES

2N170	D	25	6	20	4.0	$1.30
2N1086	D	65	9 max.	−20	8.0	1.86
2N1086A	D	65	9 max.	−20	8.0	2.00
2N1087	D	65	9 max.	−20	8.0	2.06
3N36	E	30	6	20	50.0 min.	8.35
3N37	E	30	6	20	50.0 min.	9.50

GERMANIUM TRANSISTORS (CONTINUED)

AUDIO PNP ENTERTAINMENT TYPES

G.E. No.	Fig.	Max. Coll. Dissip. @ 25° C (mw)	Min. Break-down Volts	Max. Col-lector Ma	Alpha Cutoff Mc	Net Each 1-99
2N186	C	100	−25	−200	0.8	$1.8
2N186A	C	200	−25	−200	0.8	1.9
2N187	C	100	−25	−200	1.0	1.8
2N187A	C	100	−25	−200	1.0	1.6
2N188	C	100	−25	−200	1.2	1.9
2N188A	C	200	−25	−200	1.2	1.8
2N189	C	75	−25	−50	0.8	1.7
2N190	C	75	−25	−25	1.0	1.5
2N191	C	75	−50	−50	1.2	1.8
2N192	C	75	−25	−50	1.5	1.9
2N107	C	75	−12	−10	0.5	1.0
2N241	C	100	−25	−200	1.3	2.0
2N241A	C	200	−25	−200	1.3	2.0
2N265	C	75	−25	−50	1.5	2.0
2N319	A	240	−20	−200	2.0	1.6
2N320	A	240	−20	−200	2.5	1.8
2N321	A	240	−20	−200	3.0	2.0
2N322	A	149	−16	−100	2.0	1.5
2N323	A	140	−16	−100	2.5	1.8
2N324	A	140	−16	−100	3.0	1.9
2N508	A	140	−16	−100	3.5	2.0
2N524	A	225	−30	−500	2.0	3.0
2N525	A	225	−30	−500	2.5	3.2
2N526*	A	225	−30	−500	3.0	3.5
2N527	A	225	−30	−500	3.3	4.1
2N1097	A	140	−16 max.	−100	....	1.4
2N1098	A	140	−16 max.	−100	....	1.3
2N1144	C	140	−16	−100	....	1.4
2N1145	C	140	−16	−100	....	1.3

*Certified to meet MIL-T-19500/60; **Net, 1-99‡, $5.20.**

PNP INDUSTRIAL TYPES

2N43	C	240	−30	−300	1.3	$4.1
2N43A	C	155*	−25*	....	1.3	4.1
USAF-2N43A†		Per MIL-T-19500/18				5.6
2N44	C	240	−30	−300	1.0	2.9
USAF-2N44A†	C	Per MIL-T-19500/6				5.2
2N123	C	150	−15	−125	8.0	5.4
2N123A	C	Per MIL-T-19500/30				7.0
2N135	D	100	−20	−50	3.0	2.1
2N136	D	100	−20	−50	5.0	2.5
2N137	D	100	−10	−50	7.0	6.2
2N394	A	150	−30	−200	9.0	2.1
2N395	A	150	−15	−200	4.5	2.9
2N396	A	150	−20	−200	8.0	4.4
2N396A	A	Per MIL-T-19500/64				5.0
2N397	A	150	−15	−200	12.0	5.9
2N404	A	120	−24	−100	8.0	2.9
2N450	A	150	−12	−125	5 min.	2.7
2N518	A	150	−12	−125	10 min.	6.6
2N1056	C	240	−50	−100	1.0	3.2
2N1057	C	240	−30	−300	1.3	5.8

*Ratings based on Military test requirements. †See note un n-p-n computer type.

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‡ADDITIONAL QUANTITY PRICES AVAILABLE

GERMANIUM AND SILICON RECTIFIER STACKS

GERMANIUM STACKS

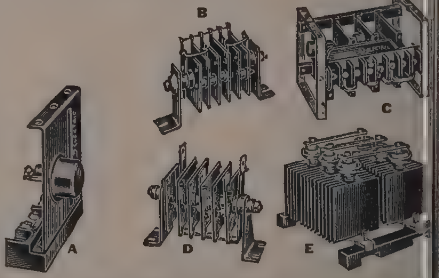
MEDIUM CURRENT—4JA3011 SERIES (FIGS. A AND C)
For general purpose power supplies, control devices, blocking circuits, etc. Extremely low power dissipation and forward voltage drop provide excellent regulation and efficiency. Available in stacks up to 12 fins, providing ratings in thousands of watts, depending upon the circuit design, with operation to 85° C. Also, available in single fin mounting. Transient PIV's up to 600 volts per cell. Maximum DC current at 55° C maximum ambient up to 48 amps.

LOW CURRENT—4JA211 SERIES (FIG. B)
Industry's most popular semiconductor rectifier series. May be arranged in stacks up to 12 fins to produce more than 160 various circuit configurations. Small, light weight, excellent regulation. PIV's up to 630 volts per cell. Maximum DC current at 55° C maximum ambient up to 6 amps.

SILICON STACKS

MEDIUM CURRENT—4JA3511 SERIES (NOT ILLUS.)
Forward voltage drops of less than one volt per cell. Will operate from −65° C to 175° C. Requires only mounting bolts and electrical connections. Special circuits designed to your order.

LOW CURRENT—4JA411 SERIES (FIG. B)
Combine high temperature operation (up to 150° C) with increased ratings (up to 18 amps DC). Hundreds of stack combinations to meet a variety of circuit conditions. High efficiency plus excellent regulation.



HIGH CURRENT—4JA6011 AND 4JA6211 SERIES (FIG. E)
Hundreds of combinations available in various circuit configurations The 4JA6011 series DC outputs up to 573 amps at 35 maximum ambient. The 4JA6211 series for lower current, low cost operation. PIV of both series up to 840 volts.

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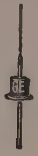
RECTIFIER CELLS

G.E. or EDEC Type No.	Fig.	Peak Inv. Volts	Max. DC Ma at °C Ambient	Max. 1 Cycle (60 cps) Surge	Max. Oper. Temp. °C	Net Each 1-99*
1	A	100	150 @ 55°	25 a.	95°	$0.80
2	A	200	100 @ 55°	25 a.	95°	1.90
3	A	300	75 @ 55°	25 a.	95°	2.65
1N93‡	A	300	75 @ 55°	25 a.	55°	3.50
51	A	100	500 @ 55°	25 a.	95°	2.15
52	A	200	500 @ 55°	25 a.	95°	2.70
53	A	300	500 @ 55°	25 a.	95°	3.60
58	A	380	500 @ 55°	25 a.	95°	5.50
53	B	95	1000 @ 135°†	4 a.	150°	2.20
54	B	190	400 @ 135°†	1.5 a.	150°	2.55
55§	B	380	400 @ 135°†	1.5 a.	150°	5.10
56	B	570	200 @ 135°†	1.5 a.	150°	10.35
15	A	100	100 @ 85°	5 a.	85°	3.00
F1N315‡	A	100	100 @ 85°	5 a.	85°	3.90
32	B	400	400 @ 150°†	15 a.	170°	9.25
33	B	400	200 @ 150°†	10 a.	170°	9.25
34	B	300	400 @ 150°†	15 a.	170°	6.95
35	B	300	200 @ 150°†	10 a.	170°	6.95
36	B	200	400 @ 150°†	15 a.	170°	4.80
37	B	200	200 @ 150°†	10 a.	170°	4.80
39	B	100	400 @ 150°†	15 a.	170°	3.50
40	B	100	200 @ 150°†	10 a.	170°	3.50
41	B	400	400 @ 150°†	15 a.	170°	6.35
42	B	400	200 @ 150°†	10 a.	170°	6.35
43	B	300	400 @ 150°†	15 a.	170°	4.25
44	B	300	200 @ 150°†	10 a.	170°	4.25
45	B	200	400 @ 150°†	15 a.	170°	2.85
46	B	200	200 @ 150°†	10 a.	170°	2.85
48	B	100	400 @ 150°†	15 a.	170°	2.10
49	B	100	200 @ 150°†	10 a.	170°	2.10
40	A	100	300 @ 100°	15 a.	150°	2.20
40B	A	100	500 @ 100°	15 a.	165°	2.20
41	A	200	300 @ 100°	15 a.	150°	2.55
41B	A	200	500 @ 100°	15 a.	165°	2.55
42	A	300	300 @ 100°	15 a.	150°	3.15
42B	A	300	500 @ 100°	15 a.	165°	3.15
43	A	400	300 @ 100°	15 a.	150°	4.45
43B	A	400	500 @ 100°	15 a.	165°	4.45
44	A	500	300 @ 100°	15 a.	150°	6.30
44B	A	500	425 @ 100°	15 a.	150°	6.30
45	A	600	300 @ 100°	15 a.	150°	8.90
45B	A	600	350 @ 100°	15 a.	150°	8.90
36	A	50	500 @ 100°	15 a.	165°	1.05
37	A	100	500 @ 100°	15 a.	165°	1.20
38	A	200	500 @ 100°	15 a.	165°	1.60
F1N538‡	A	200	500 @ 100°	15 a.	150°	4.05
39	A	300	500 @ 100°	15 a.	165°	2.00
40	A	400	500 @ 100°	15 a.	165°	3.00
F1N540‡	A	400	500 @ 100°	15 a.	150°	7.15
47	A	600	500 @ 100°	15 a.	165°	7.50
50	B	100	800 @ 135°†	15 a.	150°	3.20
51	B	200	800 @ 135°†	15 a.	150°	3.50
52	B	300	800 @ 135°†	15 a.	150°	4.25
53	B	400	800 @ 135°†	15 a.	150°	5.70
54	B	500	600 @ 135°†	15 a.	150°	7.90
55	B	600	600 @ 135°†	15 a.	150°	10.35
60	A	800	250 @ 100°	15 a.	150°	12.00
61	A	1000	250 @ 100°	15 a.	150°	16.50
62	B	800	400 @ 100°†	15 a.	150°	12.75
63	B	1000	400 @ 100°†	15 a.	150°	17.25
99	A	50	400 @ 100°	10 a.	150°	1.00
99A	A	50	400 @ 100°	10 a.	150°	1.50
00	A	100	400 @ 100°	10 a.	150°	1.20
00A	A	100	400 @ 100°	10 a.	150°	1.65
01	A	150	400 @ 100°	10 a.	150°	1.45
01A	A	150	400 @ 100°	10 a.	150°	1.90
02	A	200	400 @ 100°	10 a.	150°	1.65
02A	A	200	400 @ 100°	10 a.	150°	2.00
03	A	300	400 @ 100°	10 a.	150°	2.25
03A	A	300	400 @ 100°	10 a.	150°	3.00
04	A	400	400 @ 100°	10 a.	150°	3.30
04A	A	400	400 @ 100°	10 a.	150°	4.50
05	A	500	400 @ 100°	10 a.	150°	5.25
05A	A	500	400 @ 100°	10 a.	150°	6.15
06	A	600	400 @ 100°	10 a.	150°	7.90
06A	A	600	400 @ 100°	10 a.	150°	9.00
07	B	50	800 @ 135°†	15 a.	150°	1.80
07A	B	50	800 @ 135°†	15 a.	150°	2.10
08	B	100	800 @ 135°†	15 a.	150°	2.00
08A	B	100	800 @ 135°†	15 a.	150°	2.25
09	B	150	800 @ 135°†	15 a.	150°	2.20
09A	B	150	800 @ 135°†	14 a.	150°	2.30
10	B	200	800 @ 135°†	15 a.	150°	2.40
10A	B	200	800 @ 135°†	15 a.	150°	2.85
11	B	300	800 @ 135°†	15 a.	150°	2.85
11A	B	300	800 @ 135°†	15 a.	150°	3.60
12	B	400	800 @ 135°†	15 a.	150°	3.80
12A	B	400	800 @ 135°†	15 a.	150°	4.95
13	B	500	600 @ 135°†	15 a.	150°	6.30
13A	B	500	600 @ 135°†	15 a.	150°	7.10
14	B	600	600 @ 135°†	15 a.	150°	9.30
14A	B	600	600 @ 135°†	15 a.	150°	10.35
095	A	500	425 @ 100°	15 a.	150°	5.25
096	A	600	350 @ 100°	15 a.	150°	7.50
100	A	100	500 @ 100°	15 a.	165°	1.80
101	A	200	500 @ 100°	15 a.	165°	2.10
102	A	300	500 @ 100°	15 a.	165°	2.85
103	A	400	500 @ 100°	15 a.	165°	4.25
115	B	100	1.5 a. @ 85°†	15 a.	170°	2.20
116	B	200	1.5 a. @ 85°†	15 a.	170°	2.55
117	B	300	1.5 a. @ 85°†	15 a.	170°	3.15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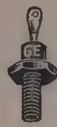
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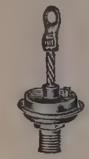
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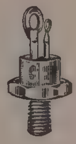
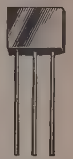

C35 Series


6GC1-6GD1

RECTIFIER CELLS (CONTINUED)

G.E. or JEDEC Type No.	Fig.	Peak Inv. Volts	Max. DC Ma at °C Ambient	Max. 1 Cycle (60 cps) Surge	Max. Oper. Temp. °C	Net Each 1-99*
1N1118	B	400	1.5 a. @ 85°†	15 a.	170°	$ 5.10
1N1119	B	500	1.5 a. @ 85°†	15 a.	170°	7.35
1N1120	B	600	1.5 a. @ 85°†	15 a.	170°	10.35
1N1487	A	100	250 @ 125°	15 a.	140°	.75
1N1488	A	200	250 @ 125°	15 a.	140°	1.00
1N1489	A	300	250 @ 125°	15 a.	140°	1.30
1N1490	A	400	250 @ 125°	15 a.	140°	1.65
1N1491	A	500	250 @ 110°	15 a.	125°	2.20
1N1492	A	600	250 @ 95°	15 a.	120°	2.75
1N1692	A	100	600 @ 100°	20 a.	115°	.70
1N1693	A	200	600 @ 100°	20 a.	115°	.90
1N1694	A	300	600 @ 100°	20 a.	115°	1.10
1N1695	A	400	600 @ 100°	20 a.	115°	1.30
1N2154*	B	50	25 a. @ 145°†	300 a.	200°	5.20
1N2155*	B	100	25 a. @ 145°†	300 a.	200°	6.80
1N2156*	B	200	25 a. @ 145°†	300 a.	200°	9.60
1N2157*	B	300	25 a. @ 145°†	300 a.	200°	13.60
1N2158*	B	400	25 a. @ 145°†	300 a.	200°	19.50
1N2159*	B	500	25 a. @ 145°†	300 a.	200°	26.10
1N2160*	B	600	25 a. @ 145°†	300 a.	200°	40.00
4JA60A*	C	100	70 a. @ 120°†	900 a.	200°	21.50
4JA60B*	C	200	70 a. @ 120°†	900 a.	200°	29.75
4JA60C*	C	300	70 a. @ 120°†	900 a.	200°	39.75
4JA60D*	C	400	70 a. @ 120°†	900 a.	200°	53.00
4JA60F*	C	50	70 a. @ 120°†	900 a.	200°	15.00
4JA60G*	C	150	70 a. @ 120°†	900 a.	200°	25.75
4JA60H*	C	250	70 a. @ 120°†	900 a.	200°	34.75
4JA60J*	C	350	70 a. @ 120°†	900 a.	200°	46.25
4JA62A*	C	100	40 a. @ 120°†	900 a.	150°	15.00
4JA62B*	C	200	40 a. @ 120°†	900 a.	150°	19.75
4JA62C*	C	300	40 a. @ 120°†	900 a.	150°	26.50
4JA62D*	C	400	40 a. @ 120°†	900 a.	150°	41.50
4JA62F*	C	50	40 a. @ 120°†	900 a.	150°	11.50
4JA62G*	C	150	40 a. @ 120°†	900 a.	150°	17.50
4JA62H*	C	250	40 a. @ 120°†	900 a.	150°	23.25
4JA62J*	C	350	40 a. @ 120°†	900 a.	150°	34.75

*Also available with reversed polarity. †Stud. ‡Please supply military contract number with order. Price does not include customer source inspection charge. §JAN1N255 is similar but per MIL-E-1/900B; **Net, 1-99*, $8.15.**

SILICON CONTROLLED C35 SERIES RECTIFIERS

Can do jobs of thyratrons, ignitrons, magnetic amplifiers, power transistors, relays, switches, contactors, circuit breakers, in many power-control and power-switching applications. DC ampere at 87° C stud up to 16 a. Maximum operating temperature, 125° C. Maximum reg'd gate signal, 3 v., 40 ma at 25° C.

G.E. Type No.	PIV* and V_{BO}	Net Each	G.E. Type No.	PIV* and V_{BO}	Net Each	G.E. Type No.	PIV* and V_{BO}	Net Each
C35A	100	$53.00	C35D	400	$228.00	C35H	250	$120.00
C35B	200	80.00	C35F	50	41.00	C35U	25	38.00
C35C	300	160.00	C35G	150	66.00	....	.....	......

*Maximum PIV and minimum V_{BO}.

VAC-U-SEL® MINIATURE DOUBLE DIODES

Universal replacement for TV horizontal phase detectors. Features longer life and greater stability. **Type 6GD1** is series connected. **Type 6GC1** is common cathode-center tap type. Forward current, 0.5 ma @ 2 v. DC. Reverse current, 5.0 μa @ −20 v. DC. Maximum operating temperature, 85° C. **Size:** .578″ w. x 5⁄16″ d. x 7⁄16″ h. less leads.

G. E. No. 6GC1 (Black) or 6GD1 (Red)—Net Each, 1-99*..**84c**

Mf[illegible]	6GC1 Replaces	6GD1 Replaces
Admiral	....	93A5, -2 93B5, -3, -4, -5
Emerson	817074	817062
General Electric	K115J510, -1, -2 K117J460, -1, -2	....
Hallicrafters	27C226	....
Hoffman	10031, 744002	....
Magnavox	....	530045, -2, -3
Marconi	817074	....
Motorola	48K741255	(48K741752) (48K742698)
Muntz	SR-0006	....
Olympic	RF 5465	RF 5794
Philco	34-8037, -1, -2, -3	....
Silvertone	....	B46-110
Sylvania	13-85943, -1, 2	....
Westinghouse	296V004H01	....
Zenith	103-20	633977

WRITE FOR SPECIFICATIONS AND PRICES ON NEW OR UNLISTED TYPES.

***ADDITIONAL QUANTITY PRICES AVAILABLE**

Sylvania Diodes and Rectifiers

MICROWAVE DIODES

Sylvania Type	Description	Net 1-99
1N21A	3,000 mc Mixer	$ 1.10
1N21B†	3,000 mc Mixer	1.10
1N21BM	Matched Pair 1N21B	2.65
1N21BR	1N21B Rev. Polarity	1.65
1N21BMR	Mtchd. Pr. 1N21B-BR	3.15
1N21C†	3,000 mc Mixer	1.80
1N21CM	Matched Pair 1N21C	4.55
1N21CR	1N21C Rev. Polarity	2.75
1N21CMR	Mtchd. Pr. 1N21C-CR	5.45
1N21D	3,000 mc Mixer Lo-N	4.70
1N21DM	Matched Pair 1N21D	11.65
1N21DR	1N21D Rev. Polarity	7.05
1N21DMR	Mtchd. Pr. 1N21D-DR	14.10
1N21E	3,000 mc Mixer	6.15
1N21EM	Matched Pair 1N21E	15.30
1N21ER	1N21E Rev. Polarity	9.20
1N21EMR	Mtchd. Pr. 1N21E-ER	18.50
1N21WE*	Double Ended 1N21E	37.45
1N21WEM*	Matched Pr. 1N21WE	93.60
1N23A	10,000 mc Mixer	1.10
1N23B†	10,000 mc Mixer	1.10
1N23BM	Matched Pair 1N23B	2.75
1N23BR	1N23B Rev. Polarity	1.60
1N23BMR	Mtchd. Pr. 1N23B-BR	3.25
1N23C†	10,000 mc Mixer	1.80
1N23CM	Matched Pair 1N23C	4.55
1N23CR†	1N23C Rev. Polarity	2.75
1N23CMR	Mtchd. Pr. 1N23C-CR	5.45
1N23D	10,000 mc Mixer	4.70
1N23DM	Matched Pair 1N23D	11.65
1N23DR	1N23D Rev. Polarity	7.05
1N23DMR	Mtchd. Pr. 1N23D-DR	14.10
1N23E	10,000 mc Mixer	6.50
1N23EM	Matched Pair 1N23E	16.25
1N23ER	1N23E Rev. Polarity	9.75
1N23EMR	Mtchd. Pr. 1N23E-ER	19.45
1N23WE*	Double Ended 1N23E	37.45
1N23WEM*	Mtchd. Pr. 1N23WE	93.60
1N25†	1,000 mc Mixer	3.60
1N25R	1N25 Rev. Polarity	5.40
1N25A	1,000 mc Mixer Lo-N	8.65
1N25AR	1N25A Rev. Polarity	12.95
1N26*†	24,000 mc Mixer	10.10
1N26M*	Matched Pair 1N26	25.20
1N26R*	1N26 Rev. Polarity	15.10
1N26MR*	1N26M Rev. Polarity	30.25
1N26A*	24,000 mc Mixer Lo-N	12.25
1N26AM*	Matched Pair 1N26A	30.65
1N26AR*	1N26A Rev. Polarity	18.40
1N26AMR*	Mtchd. Pr. 1N26A-AR	36.70
1N31†	10,000 mc Video Det.	7.20
1N32†	3,000 mc Video Det.	13.70
1N53*†	34,000 mc Mixer	31.70
1N53M*	Matched Pair 1N53	79.20
1N53R*	1N53 Rev. Polarity	47.50
1N53MR*	1N53M Rev. Polarity	95.05
1N53B*	35,000 mc Mixer	42.90
1N53BM*	Matched Pair 1N53B	107.10
1N53BR*	1N53B Rev. Polarity	64.40
1N53BMR*	Mtchd. Pr. 1N53B-BR	128.55
1N76	10,000 mc Video Det	2.80
1N76R	1N76 Reverse Polarity	4.20
1N76A	10,000 mc Video Detector Low Noise	3.40
1N78*†	16,000 mc Mixer	10.80
1N78M*	Matched Pair 1N78	27.05
1N78R*	1N78 Reverse Polarity	16.25
1N78MR*	1N78M Rev. Polarity	32.40
1N78A*	16,000 mc Mixer	17.30
1N78AM*	Matched Pair 1N78A	43.20
1N78AR*	1N78A Rev. Polarity	25.90
1N78AMR*	Mtchd. Pr. 1N78A-AR	51.85
1N78B*	16,000 mc Mixer	22.30
1N78BM*	Matched Pair 1N78B	55.85
1N78BR*	1N78B Rev. Polarity	33.50
1N78BMR*	Mtchd. Pr. 1N78B-BR	66.95
1N79	Meter Rectifier	2.55
1N149	9,375 mc Mixer	5.75
1N286*	10-22,000 mc Brd. Bd.	53.60
1N358*	Broad Band Video Detector 1-12.4 kmc TriPolar Crystal	25.90
1N358R*	1N358 Rev. Polarity	38.90
1N358A*	1-12.4 kmc TriPolar Crystal Low Noise	31.50
1N358AR*	1N358A Rev. Polarity	47.30
1N369*	3-12.4 kmc DC Return	35.70
1N369A*	Broad Band Video Detector 26.5140 kmc	41.60
1N369AR*	1N369A Rev. Polarity	62.40
1N415B	Double Ended 1N23B	6.10
1N415BM	Matched Pair 1N415B	15.35
1N415C	Double Ended 1N23C	6.85
1N415CM	Matched Pair 1N415C	17.10
1N415D	Double Ended 1N23D	9.70
1N415DM	Matched Pair 1N415D	24.30
1N415E	Double Ended 1N23E	11.50
1N415EM	Matched Pair 1N415E	28.80
1N415EMR	Match.Pr.1N415E-ER	34.55
1N416B	Double Ended 1N21B	6.10
1N416BM	Matched Pair 1N416B	15.35
1N416C	Double Ended 1N21C	6.85
1N416CM	Matched Pair 1N416C	17.10
1N416D	Double Ended 1N21D	9.70
1N416DM	Matched Pair 1N416D	24.30
1N416E	Double Ended 1N21E	11.15
1N416EM	Matched Pair 1N416E	27.90

MICROWAVE DIODES (CONT.)

Sylvania Type	Description	Net 1-99
1N446*	26.5-40 mc Broad Band Video Detector	$56.55
1N446R*	1N446 Rev. Polarity	84.80
1N630*	Broad Band Vid. Det.	57.20
1N630A*	Broad Band Vid. Det.	113.75
1N630R*	1N630 Rev. Polarity	85.75
1N830	UHF Detector	2.60
1N830A	1N830, PIV of 5.0 v.	4.30
1N831	S Band Mixer	9.50
1N832	X Band Mixer	10.00
1N833	X Band Video Det.	6.40
1N1132*	3-12.4 kmc Broad Band Video Det. Tri Polar Crystal	56.55
1N1132R*	1N1132 Rev. Polarity	84.80
1N1610*	High Temp. Broad Band Video Detector 3-12 kmc	64.50
1N1611*	X-Band Video Detector 9 kmc	10.80
1N1611R	Type 1N1611 with Reverse Polarity	16.20
1N2127	Broad Band, Tri Polar Video Detector	46.55
1N2510*	X Band Mixer Similar to 1N23C	23.75
1N2510R*	X Band Mixer with Reverse Polarity	54.70
1N2510M*	Match. Pr. 1N2510	28.10
1N2510MR*	Matched Pair Reverse Polarity 1N2510	57.60 57.60

GERMANIUM AND SILICON RECTIFIERS

Sylvania Type	Description	Net 1-99
1N91	100 v. 150 ma. Ger.	$ 0.80
1N92	200 v. 100 ma Ger.	1.90
1N93	300 v. 75 ma German.	2.65
SR200	200 Mil 300 PIV Sil.	.65
1N253	65 v., 1 amp Silicon	2.20
1N254	135 v. 400 ma Silicon	2.55
1N255	270 v. 400 ma Silicon	5.10
1N256	400 v. 200 ma Silicon	10.35
SR500	500 Mil 400 PIV Sil.	1.15
1N584	400 v. 200 ma Ger.	3.00

GENERAL PURPOSE, SILICON DIODES

Sylvania Type	Description	Net 1-99
1N34A	60 v., Gen. Purp. Diode	$ 0.43
1N35	Matched Pair 1N34A	1.68
1N38B	100 v., Gen. Purpose	.80
1N38B†	100 v., Gen. Purpose	.85
1N39B	200 v., Gen. Purpose	2.50
1N40	25 v., Varistor, Plug-in	5.00
1N41	25 v., Varistor, Can	12.00
1N42	100 v., Varistor, Plug-in	8.25
1N48	85 v., General Purpose	.43
1N52A	85 v., General Purpose	.70
1N54A	50 v., High Back Res.	.80
1N55A	150 v., Gen. Purpose	1.70
1N56A	40 v., High Cond.	.83
1N58A	100 v., Gen. Purpose	.85
1N60	25 v., Video Detector	.43
1N63	100 v., High Back Res.	1.20
1N64	20 v., Video Detector	.43
1N65	70 v., Gen. Purpose	.53
1N67A	80 v., High Back Resistance Mini.	.72
1N68A	100 v., General Purpose Miniature	1.04
1N69A	60 v., General Purpose	.43
1N69A†	60 v., General Purpose	.48
1N70A	100 v., General Purp.	.77
1N70A†	100 v., General Purp.	.82
1N71	40 v., Low-Z Varistor	5.00
1N72	5 v., UHF TV Mixer	.95
1N77A	50 v., 20MW	7.50
1N77B	Smaller dia. 1N77A	7.50
1N81A	40 v., High Back Res.	.77
1N81A†	40 v., High Back Res.	.82
1N82	5 v., UHF TV Mixer	.95
1N82A	1N82 with Low Noise, UHF Mixer	.91
1N90	60 v., Gen. Purp. Mini.	.43
1N98	80 v., High Back Resistance, Miniature	.96
1N100	80 v., High Resistance	1.35
1N115	60 v., Computer	.67
1N117	60 v., 30 ma General Purpose Miniature	.67
1N118	60 v., Computer Mini.	.80
1N119	60 v., Computer	1.00
1N120	60 v., Computer	.60
1N126A	60 v., Gen. Purp. Mini.	.45
1N126A†	60 v., Gen. Purp. Mini.	.45
1N127A	100 v., Gen. Pur. Mini.	.89
1N127A†	100 v., Gen. Pur. Mini.	.89
1N128	40 v., Gen. Purp. Mini.	.68
1N128†	40 v., Gen. Purp. Mini.	.68
1N140	50 v., General Purpose	.62
1N191	90 v., Computer Mini.	1.00
1N192	70 v., Computer	.60
1N193	40 v., Hi-Temp. Silicon	6.60
1N194	40 v., Hi-Temp. Silicon	9.90

GENERAL PURPOSE AND SILICON DIODES (CONT.)

Sylvania Type	Description	Net 1-99
1N195	40 v., Hi-Temp. Silicon	$ 7.85
1N196	50 v., Hi-Temp. Silicon	11.55
1N197	60 v., Hi-Temperature	1.20
1N198†	60 v., Hi-Temperature	1.25
1N198A	80 v., Continued Forward Current High-Temp. 1N67A	1.20
1N270	80 v., 90 ma Germanium	1.00
1N276	50 v., 40 ma Gen. Purp. Miniature	1.65
1N279	30 v., Hi-Cond. Mini.	.86
1N281	60 v., 100 ma Hi-Cond. Diode	.70
1N283	20 v., Hi-Cond. Mini.	1.23
1N294	60 v., 50 ma Silicon	.53
1N295	40 v., TV Video Det.	.35
1N297	80 v., 35 ma DC Rest.	1.10
1N298	70 v., 50 ma Computer	.88
1N417	60 v., Computer	1.25
1N418	60 v., Computer	.72
1N419	80 v., Computer	1.42
1N435	40 v., Low Impedance, Varistor	9.75
1N448	100 v., VLI	1.25
1N450	100 v., VLI	1.05
1N451	150 v., VLI	1.50
1N455	30 v., VLI	3.30
1N456	25 v., 135 ma Gen. Purp. Silicon Mini.	3.10
1N456A	200 ma, 25 v. Low Leakage	4.06
1N457	70 v., Gen. Purpose Silicon Miniature	3.50
1N457A	200 ma, 60 v. Low Leakage	4.35
1N458	150 v., Gen. Purpose Silicon Miniature	3.90
1N458A	200 ma, 125 v. Low Leakage	4.75
1N459	200 v., Gen. Purpose Silicon Miniature	4.15
1N459A	200 ma, 175 v. Low Leakage	4.94
1N461	25 v., Gen. Purpose Silicon Miniature	1.24
1N461A	200 ma, 25 v., General Purpose	2.28
1N462	70 v., Gen. Purpose Silicon Miniature	1.82
1N462A	200 ma, 60 v., General Purpose	2.96
1N463	200 v., Gen. Purpose Silicon Miniature	2.21
1N463A	200 ma, 125 v., General Purpose	3.35
1N464	125 v., 60 ma Silicon Miniature	2.08
1N464A	200 ma, 175 v., General Purpose	3.22
1N482	30 v., 30 ma Hi-Cond. Silicon Miniature	1.70
1N482A	30 v., 15 ma Hi-Cond. Silicon Miniature	2.40
1N482B	30 v., Very Low Leakage	3.40
1N483	60 v., General Purpose	2.40
1N483A	60 v., Low Leakage	2.95
1N483B	50 v., Hi-Conductance Silicon Miniature	3.70
1N484	125 v., Gen. Purpose	2.80
1N484A	125 v., Low Leakage	3.25
1N484B	125 v., Very Low Leakage	4.00
1N485	175 v., General Purp.	3.10
1N485A	175 v., Low Leakage	3.60
1N485B	175 v., Very Low Leakage	4.50
1N486	225 v., General Purp.	3.60
1N486A	160 v., Hi-Conductance Silicon Mini.	4.30
1N487	300 v., General Purp.	5.20
1N487A	300 v., Low Leakage	6.60
1N488	380 v., General Purp.	6.25
1N488A	380 v., Low Leakage	8.30
1N571	15 v., Computer	1.15
1N625	30 v., Fast Recovery Germanium	1.66
1N626	50 v., Fast Recovery Germanium	2.28
1N627	100 v., Fast Recovery Germanium	1.90
1N628	150 v., Fast Recovery Germanium	2.54
1N629	200 v., Fast Recovery Germanium	2.80
1N632	60 v., 16 ma Miniature	.7
1N633	80 v., 60 ma Miniature	1.46
1N634	60 v., VLI, Miniature	1.0
1N636	20 v., Gen. Purp. Mini.	.3
1N695	20 v., 100 ma, Hi-Cond.	1.5
1N805	10 v., 455 kc Point Contact Detector	.34
1N1051	15 v., Computer	1.04

*Prices for lots of 1-9. †JAN type.

emiconductor Products

RCA SEMICONDUCTOR PRODUCTS

CA GERMANIUM TRANSISTORS

transistors are p-n-p types, except n types, which are indicated with *.

RCA Type	Description	Net Each
04	2N215 with 3-pin base	$ 2.25
05	AF Amplifier	2.90
09	2N217 with 3-pin base	1.51
39	2N218 with 3-pin base	1.70
40	2N219 with 3-pin base	1.77
75	2N220 with 3-pin base	2.42
76	AF power transistor	2.97
15	Class A AF amplifier	2.09
17	P-p class B AF amplifier	1.51
18	Class A 455-kc IF amp.	1.70
19	Converter in 540-1640 kc band	1.77
20	Cl. A low-noise AF amp.	2.25
- N220	JAN Class A low-noise AF amplifier	4.42
47	"Drift" transistor RF amplifier	3.06
69	Comp. swtchg. transistor	2.58
70	Class A or B large signal AF amplifier	1.58
74	"Drift" transistor RF amplifier	3.06
A- N274	USA "Drift" transistor RF amplifier	5.55
01	AF power transistor	2.93
01-A	Same as 2N301 but has peak collector voltage rating of 60 volts	4.83
07	AF power transistor	1.50
31†	Class A AF amplifier	2.02
51	AF power transistor	3.22
56*†	High-current computer switching transistor	5.08
57*†	High-current computer switching transistor	6.38
58*†	High-current computer switching transistor	8.69
70	"Drift" transistor RF amplifier	2.81
71	"Drift" transistor oscil.	2.97
72	"Drift" transistor mixer	2.74
73	"Drift" transistor class A 455-kc IF amplifier	1.74
2N374	"Drift" transistor conv. in 540-1640 kc band	$1.81
2N376	AF power transistor	3.38
2N384	VHF "Drift" transistor	6.44
2N398†	High-volt. comp. swtchg.	2.25
2N404	Med.-spd comp. swtchg.	2.58
USAF-2N404	2N404 to MIL-T-19500A /20 (USAF) specs	2.81
2N405	2N406 with 3-pin base	1.03
2N406	AF driver amplifier	1.03
2N407	2N408 with 3-pin base	1.77
2N408	AF large signal amp	1.17
2N409	2N410 with 3-pin base	1.42
2N410	IF amp (Broadcast)	1.42
2N411	2N412 with 3-pin base	1.45
2N412	Converter in 540-1640 kc band	1.45
2N456	AF power transistor	3.54
2N457	AF power transistor	5.64
2N544	"Drift" transistor RF amplifier, standard AM broadcast band	1.90
2N561	Power switching, DC-to-DC converter, AF amplifier, etc.	6.44
2N578†	High-current computer switching transistor	3.63
2N579†	High-current computer switching transistor	4.83
2N580†	High-current computer switching transistor	5.64
2N581†	Medium-speed computer switching transistor	2.09
2N582†	High-speed computer switching transistor	4.83
2N583	Medium-speed computer switching transistor	2.09
2N584	High-speed computer switching transistor	4.83
2N585*†	Medium-speed computer switching transistor	2.90
2N586	Low-speed swtchg. trans.	2.97
2N591	Class A AF driver amp.	1.09
2N640	Auto receiver RF amp.	1.93
2N641	Auto receiver IF amp.	1.77
2N642	Auto receiver converter	1.86
2N643†	High-speed computer switching	4.03
2N644†	High-speed computer switching	$ 6.03
2N645†	High-speed computer switching	8.05
2N647*	AF large signal amplifier	1.77
2N649*	Class A AF amplifier	1.42
2N1010*	Cl. A low-noise AF amp.	2.81
2N1014	Like 2N561; higher max. voltage ratings	12.08
2N1090*†	Med.-spd. comp. swtchg.	4.03
2N1091*†	Med.-spd. comp. swtchg.	6.03
2N1224‡	"Drift" RF, IF amp	3.06
2N1225‡	VHF "Drift"	6.44
2N1226‡	"Drift" RF, IF amp	4.67
2N1300	Hi-speed comp. swtchg.	6.03
2N1301	Hi-speed comp. swtchg.	6.84

†JEDEC TO-9 case.
‡JEDEC TO-33 outline.

RCA SILICON TRANSISTORS

RCA Type	Description	Net 1-99
2N1067*	AF power transistor	$36.75
2N1068*	AF power transistor	49.00
2N1069*	AF power transistor	96.25
2N1070*	AF power transistor	113.75
2N1092*	AF power transistor	28.00

RCA SILICON RECTIFIERS

1N440B	100 v. magnetic amplifier	$ 2.20
1N441B	200 v. magnetic amplifier	2.55
1N442B	300 v. magnetic amplifier	3.15
1N443B	400 v. magnetic amplifier	4.45
1N444B	500 v. magnetic amplifier	6.30
1N445B	600 v. magnetic amplifier	8.90
1N536	50 v. industrial rectifier	1.10
1N537	100 v. industrial rectifier	1.25
1N538	200 v. industrial rectifier	1.60
1N539	300 v. industrial rectifier	2.00
1N540	400 v. industrial rectifier	3.00
1N547	600 v. industrial rectifier	7.50
1N1095	500 v. industrial rectifier	5.25
1N1763	400 v. TV-radio receiver, 500 ma DC	1.20
1N1764	500 v. TV-radio receiver, 500 ma DC	1.58

SYLVANIA TRANSISTORS

Type	V.	Description	Net#
4†	40	General Purpose	$ 3.20
5*	40	General Purpose	1.12
3	...	Use 2N524	......
4	...	Use 2N525	......
8†	30	Power, Fins	5.16
4*	20	RF-IF Amp. 3MC	1.36
4A*	20	RF-IF Amp. 5MC	5.60
5*	30	Power, Fins	5.16
01†	30	Power	4.76
02*	30	Power	4.76
04†	30	AF Amplifier	2.23
109†	25	General Purpose	1.59
123†	10	Hi-Freq. Switch.	5.24
139†	16	IF Amplifier	1.68
140†	16	Converter	1.76
141†	60	Power, Fins	9.92
142*	60	Power, Fins	9.92
143†	60	Power	9.52
144*	60	Power	9.52
155†	30	Gen. Purp. Power	2.78
168A*	15	IF Amplifier	1.97
169A*	25	IF Amplifier	2.43
175†	10	Lo-Noise, AF Amp.	2.40
176†	30	Gen. Purp. Power	2.78
193*	15	Local Oscillator	1.44
194*	15	Mixer-Converter	1.52
194A*	20	Mixer & Converter	1.44
211*	10	Local Oscillator	1.91
212*	10	Hi-Gain Mix./Con.	1.49
213*	25	Hi-Gain AF Amp.	1.12
213A*	40	Hi-Gain AF Driver	1.17
214*	25	Hi-Gain AF Amp.	1.36
214MP*	25	Matched Pr. 2N214	2.71
216*	15	IF Amplifier	1.68
217†	14	AF Amplifier	1.60
218†	16	IF Amplifier	1.68
219†	16	IF Amplifier	1.77
228*	25	Audio Amplifier	1.60
229*	10	Gen. Purp. Audio	.65
233*	10	Gen. Purpose, RF	.65
233A*	15	Gen. Purpose, RF	1.09
235A†	40	Gen. Purp. Power	2.78
235B†	40	Power	3.00
236B†	40	Power	3.97
241A†	25	Audio Amplifier	1.92
242†	45	Power	2.78
247†	35	RF Amplifier	3.05
250†	30	Power	3.56
255†	15	Gen. Purp. Power	1.35
256†	30	Gen. Purp. Power	1.57
257	40	Audio Amplifier	2.94
270†	12	Audio Amplifier	1.74
285A†	40	Hi Power	3.89
292*	15	RF Amplifier	1.72
2N296†	60	Power, Switching	$ 5.95
2N301†	40	Power	2.78
2N301A†	60	Power	4.77
2N306*	20	Audio Amplifier	.80
2N307†	30	Gen. Purp. Power	1.35
2N307A†	35	Hi Power	2.15
2N312*	15	Computer	8.00
2N321†	25	Audio Amplifier	1.93
2N323†	16	Audio Driver	1.79
2N324†	16	AF Driver	1.93
2N326*	35	Power	19.20
2N332*	45	7 mc Silicon	9.45
2N333*	45	5 mc Silicon	16.20
2N334*	45	8 mc Silicon	16.20
2N335*	45	6 mc Silicon	21.60
2N336*	45	7 mc Silicon	26.50
2N337*	40	Hi-Freq. Silicon	19.15
2N338*	40	Hi-Freq. Silicon	25.80
2N350†	40	Power (4 watt)	3.14
2N351†	40	Pwr. (4 w.) Hi-Gn.	3.34
2N356*	20	Computer	5.05
2N357*	20	Computer	6.35
2N358*	20	Computer	8.65
2N370†	12	RF Amp. (drift)	2.80
2N371†	12	RF Osc. (drift)	2.95
2N372†	12	RF Mixer (drift)	2.70
2N373†	12	IF Amp. (drift)	1.73
2N374†	25	Converter (drift)	1.81
2N377*	25	Computer	3.20
2N381†	10	Class B AF Amp.	1.36
2N382†	10	Class B AF Amp.	1.68
2N383†	25	Audio Amplifier	2.01
2N384†	12	VHF Amplifier	6.44
2N385*	25	Computer	3.70
2N388*	25	Computer	5.20
2N388*	...	BU Ships	6.40
2N398†	105	Hi-V on-off cont.	2.25
2N399†	40	Power	3.43
2N401†	40	Power	3.11
2N404†	25	Switching	2.80
2N405†	20	AF Driver	.96
2N406†	12	Audio Driver	.96
2N407†	20	General Purpose	1.04
2N408†	12	Audio Amplifier	1.04
2N409†	13	IF Amplifier	1.36
2N410†	13	IF Amp. (flex. lds.)	1.36
2N411†	10	Converter	1.44
2N412†	10	Converter	1.44
2N419†	40	Power	3.51
2N420†	40	Fuel Injector	2.78
2N425†	30	2.5 mc, 20 db Min. Gain	4.15
2N426†	30	3.0 mc, 30 db Min. Gain	4.30
2N427†	30	Computer & Switch	$ 6.50
2N428†	30	10.0 mc, 60 db Min. Gain	8.00
2N438*	25	Hi-Freq. Switch.	4.00
2N438A*	25	Hi-Freq. Switch.	4.40
2N439*	30	Computer	5.60
2N439A*	30	Hi-Freq. Switch.	5.60
2N440*	30	Hi-Freq. Switch., 100 mw	8.00
2N440A*	25	Hi-Freq. Switch., 150 mw	8.80
2N515*	18	455 kc, IF Amp.	1.42
2N516*	18	455 kc, IF Amp.	1.49
2N517*	18	455 kc, IF Amp.	1.76
2N519†	25	Mod. Speed Switch	1.60
2N524†	45	Mod. Speed Switch	2.98
2N525†	45	Switching	3.12
2N526†	45	Med. Power AF Amp.	3.55
2N527†	45	Med. Power AF Amp.	4.15
2N544†	18	RF Amplifier	1.89
2N554†	30	Gen. Purp. Power	1.35
2N556*	25	Hi-Speed Switch	5.60
2N557*	20	Hi-Speed Switch.	2.90
2N558*	15	Hi-Speed Switch.	5.60
2N576*	20	Computer	8.72
2N576A*	40	Core Driver	10.40
2N582†	25	Computer	5.60
2N585*	25	Computer	2.90
2N587*	40	Hi-Speed Switch.	5.20
2N591†	40	Hi-Gain, AF Driver	1.15
2N624†	30	12.5 mc Amplifier	12.80
2N677†	30	High Power	3.40
2N677A	40	High Power	4.50
2N677B†	70	High Power	8.63
2N677C†	80	High Power	13.13
2N678†	30	High Gain Power	4.77
2N678A†	40	High Gain Power	5.86
2N679*	25	Hi-Speed Switch.	1.68
2N1008†	20	Audio Driver	1.43
2N1008A†	40	Audio Driver	2.11
2N1058*	20	AM Mixer, Conv.	1.52
2N1059*	40	Audio Amplifier	.96
2N1101*	20	Audio Amplifier	.72
2N1102*	40	Audio Amplifier	.75
2N1114*	25	Switching	5.60
2N1218*	45	Audio Power	8.00
2N1251*	20	Audio Driver	.96
2N1264†	12	Drift 30 mc Amp.	1.30
2N1265†	10	Audio Amplifier	.65
2N1266†	10	RF Amplifier	.65
2N1299*	40	Computer	5.20

#In quantities of 1-99. †P-n-p. *N-p-n.

Clevite Semiconductors

GOLD BONDED SUBMINIATURE GLASS GERMANIUM DIODES

A complete line that covers a wide variety of applications. Size: 0.265″ long x 0.105″ dia.; leads 1½″ long. Temperature range, −55° to +90° C. Shunt capacity, 0.5 μμf average. Power dissipation, 80 mw at 25° C, average.

GENERAL PURPOSE TYPES

Clevite Type	Fwd. Ma @ 1 Volt	Max. Inv. Current μa @ V.	Net Ea., 1-99	100-999
1N34A	5	500@−50 30@−10	$0.39	$0.30
1N38	3	625@−100 6@−3	.79 .79	.63 .63
1N38A	5	500@−100 5@−3	.80	.64
1N52	5	150@−50	.75	.60
1N56	15	300@−30	.70	.52
1N56A	15	300@−30	.72	.53
1N58A	5	600@−100	.85	.60
1N63	5	50@−50	.90	.83
1N65	5	200@−50	.50	.40
1N66	5	800@−50 50@−10	.37	.31
1N68A	5	625@−100	1.00	.78
1N89	5	100@−50 8@−5	.75	.60
1N90	5	500@−50	.39	.30
1N95	10	500@−50	.52	.40
1N97	10	100@−50 8@−5	.88	.66
1N116	5	100@−50	.67	.50
1N117	10	100@−50	.67	.50
1N118	20	100@−50	.75	.60
1N118A	40	100@−50	.77	.60
1N126	5	800@−50 50@−10	.45	.34
1N127	5	300@−50 25@−10	.89	.70
1N128	5	10@−10	.68	.53
1N139	20	1500@−50	.40	.33
1N140	40	300@−50	.59	.50
1N287	20	1500@−50	.65	.53
1N290	5	100@−100	1.35	1.10
1N291	40	100@−100	1.35	1.10
1N292	100	200@−50	1.02	.86
1N294	5	800@−50 10@−10	.60	.40
1N297	3.5	100@−100 10@−5	1.04	.90
1N310	15	100@−100 20@−20	1.30	1.00
1N447	25	60@−30 20@−10	.85	.73
1N448	25	100@−100 30@−30	1.25	.96
1N490	5	250@−50 100@−20	.89	.79
CTP316	100	20@−50	1.70	1.40
CTP462	150	5@−10	.50	.40
CTP591	1.4*	4@−3	1.10	.95

*At −3 volts.

HIGH CONDUCTANCE TYPES

1N96	20	500@−50	$0.60	$0.45
1N96A	40	500@−50	.6[illegible]	.45
1N98	20	100@−50 8@−5	.95	.72
1N98A	40	100@−50 8@−5	.97	.75
1N100	20	50@−50 5 @−5	1.28	.97
1N100A	40	50@−50 5@−5	1.30	.99
1N118	20	100@−50	.75	.60
1N118A	40	100@−50	.77	.60
1N144	100	200@−20	.68	.51
1N270	200	100@−50	1.00	.80
1N273	100	20@−20	1.20	.95
1N279	100	200@−20	.80	.71
1N283	200	20@−10	1.17	.91
1N288	40	350@−50	.80	.63
1N308	300	500@−8	.60	.48
1N449	50	30@−30 10@−10	1.15	.95
1N450	50	100@−100 30@−30	1.05	.75
1N451	50	150@−150	2.10	1.70
1N452	100	30@−30	1.17	.97
1N453	100	100@−100 30@−30	1.85	1.40
1N454	200	50@−50	1.18	.87
1N455	300	30@−30	1.27	1.03
1N497	120*	5@−20	1.35	1.05
1N498	120*	5@−40	1.70	1.40
1N499	120*	10@−50	1.75	1.45
1N500	120*	10@−60	2.05	1.75
1N501	100*	20@−80	2.30	2.00
1N502	100*	20@−100	2.50	2.20
1N634	50	115@−100 35@−30	1.05	.75
1N635	50	175@−150	3.80	3.05
CTP313	100	20@−100 5@−10	2.95	1.85

*At 0.8 volt.

HIGH RESISTANCE TYPES

Clevite Type	Fwd. Ma @ 1 Volt	Max. Inv. Current μa @ V.	Net Ea., 1-99	100-999
1N54	5	10@−10	$0.60	$0.55
1N54A	5	100@−50 7@−10	.65	.59
1N55	5	800@−150 300@−100	1.30	1.15
1N55A	5	500@−150	1.40	1.25
1N55B	5	500@−150	1.95	1.50
1N67A	5	50@−50 5@−5	.80	.71
1N75	5	50@−50	1.10	.85
1N99	10	50@−50 5@−5	1.05	.90
1N100A	40	50@−50 5@−5	1.30	.99
1N107	150	200@−10	.95	.87
1N108	50	200@−10	.95	.80
1N111	5	125@−50 25@−10	.97	.85
1N128	5	10@−10	.68	.53
1N141	20	50@−50	1.05	.70
1N142	5	100@−100	1.27	1.07
1N143	40	100@−100	1.30	1.10
1N273	100	20@−20	1.20	.95
1N289	20	50@−50	1.09	.90
1N497	120*	5@−20	1.35	1.05
1N498	120*	5@−40	1.70	1.40
1N499	120*	10@−50	1.75	1.45
1N500	120*	10@−60	2.05	1.75
1N501	100*	20@−80	2.30	2.00
1N502	100*	20@−100	2.50	2.20
CTP591	1.4‡	4@−3	1.10	.95

*At 0.8 volt. ‡At −3.0 volts.

COMPUTER TYPES

1N67A	5	50@−50 5@−5	$0.80	$0.71
1N112	5	250@−50* 50@−10*	.87	.65
1N113	5	125@−50* 25@−10*	1.13	.85
1N114	5	250@−50* 50@−10*	.87	.65
1N115	5	500@−50* 100@−10*	.65	.50
1N119	5	125@−50* 25@−10*	1.38	1.08
1N120	5	125@−50* 25@−10*	1.28	.97
1N191	5	400K♯*	1.00	.80
1N192	5	200K♯*	.95	.75
1N270	200	100@−50	1.00	.80
1N276	40	100@−50 20@−10	1.50	1.25
1N283	200	20@−10	1.17	.91
1N298	30†	250@−40	.88	.65
1N309	100	100@−20	.85	.72
1N312	30	50@−50	1.20	.95
1N313	20	50@−100 10@−20	2.15	1.75
CTP301	40	25@−50	1.60	1.35
CTP307	300	20@−30	1.50	1.00
CTP309	300	20@−6	.65	.59
CTP553	100	200@−20	.90	.80
CTP592	1.4‡	4@−3	1.40	1.15

*Measured at 55° C on oscilloscope sweep. †At 2 volts at 50° C. ‡At 3.0 volts. ♯Between −10 and −50 v.

MILITARY TYPES

JAN 1N128	3	10@−10	$0.69	$0.53
JAN 1N198	5	250@−50* 75@−10*	1.25	.90
JAN 1N277	100	250@−50* 75@−10*	2.00	1.40
JAN 1N281	100	500@−50 30@−10	.97	.65

*Measured at 75° C.

HIGH TEMPERATURE TYPES

1N198	5	250@−50 75@−10	$1.20	$0.85
1N277	100	250@−50 75@−10	1.95	1.35
1N278	20	125@−50	2.10	1.50

VOLTAGE LIMITERS

Germanium Type CTP573—Rated 50 ma at 25° C with 200 ma peak oper. current. Fwd. voltage +20%, 0.30 v. at 1 ma; 1 v. max. at 100 ma. Max. reverse current, 15 μa at −2 v. at 25° C.

Net Each, Lots 1-99.................**50c**
Net Each, Lots 100-999...............**35c**

22X-59A

Silicon Type CTP2344—Rated 150 ma at 25° C with 500 ma peak oper. current. Fwd. voltage +10%, 0.64 v. at 1 ma; 1 v. max. at 100 ma. Max. reverse current, 0.1 μa at −2 v. at 25° C.

Net Each, Lots 1-99...........**$1.25**
Net Each, Lots 100-999.........**.80**

SUBMINIATURE GLASS SILICON DIODES

Meet high speed switching and general purpose requirements under severe conditions.

GENERAL PURPOSE TYPES

Clevite Type	Net Each 1-99	100-999	Clevite Type	Net Each 1-99	100-999
1N456	$3.10	$2.20	1N483A	$2.95	$2.25
1N457	3.50	2.70	1N483B	3.70	2.85
1N457*	3.58	2.75	1N484	2.80	2.10
1N458	3.90	3.00	1N484A	3.25	2.40
1N458*	3.93	3.03	1N484B	4.00	3.15
1N459	4.15	3.20	1N485	3.10	2.20
1N459*	4.19	3.23	1N485A	3.60	2.70
1N461	1.24	.95	1N485B	4.50	3.35
1N462	1.82	1.40	1N486	3.60	2.70
1N463	2.21	1.70	1N486A	4.30	3.20
1N464	2.08	1.60	1N487	5.20	3.85
1N482	1.70	1.35	1N487A	6.60	5.00
1N482A	2.40	1.80	1N488	6.25	4.75
1N482B	3.40	2.55	1N488A	8.30	6.25
1N483	2.40	1.80			

*JAN type.

FAST SWITCHING TYPES

1N625	$1.53	$1.18	1N779	$4.80	$3.60
1N626	1.85	1.43	1N818	2.30	1.80
1N627	2.28	1.75	1N890	3.60	2.80
1N628	2.54	1.95	CTP2310	2.30	1.70
1N629	2.80	2.15	CTP2312	2.30	1.80
1N643	4.80	3.60	CTP2313	2.85	2.20
1N658	4.25	3.40	CTP2314	3.10	2.40
1N659	4.00	3.26	CTP2315	1.65	1.25
1N660	4.13	3.38	CTP2316	1.90	1.38
1N661	4.97	4.06	CTP2317	2.80	2.00
1N662	2.45	1.85	CTP2325	3.10	2.40
1N663	4.80	3.60	CTP2344	1.25	.80
1N778	3.20	2.30	CTP2359	2.50	1.90

GERMANIUM P-N-P POWER TRANSISTORS

Power, general purpose, hi-fi amplifier, and switching units. Hermetically sealed; high power ratings, gain, and frequency response; low distortion and thermal resistance. Nickel plated copper mounting base; single-piece drawn steel cap. Size: 1.005″ w. x 1.187″ l. x 0.390″ h. with 0.460″ leads, max.

Clevite Type	Net Each 1-99	100-999	Clevite Type	Net Each 1-99	100-999
CTP1105	$2.60	$1.65	2N456	$5.50	$3.5
CTP1109	1.35	.90	2N457	8.75	5.60
CTP1111	3.45	2.45	2N458	13.25	9.7
CTP1112	5.50	3.30	2N618	6.00	4.0
CTP1117	3.15	2.10	2N637	3.30	2.2
CTP1127*	8.20	6.40	2N637A	4.50	3.0
CTP1133	3.45	2.85	2N637B	6.00	4.0
			2N638	3.10	2.07
CTP-1133A	4.00	3.05	2N638A	4.00	2.67
			2N638B	5.50	3.67
CTP-1133B	4.25	3.25	2N639	2.70	1.8
CTP1137	2.95	2.00	2N639A	3.50	2.3
CTP1222	4.15	3.35	2N639B	5.00	3.3
2N155	2.75	1.85	CTP1500	15.00	9.5
2N235A	2.75	1.85	CTP1503	9.80	7.
2N235B	3.05	2.05	CTP1504	5.30	3.4
2N242	2.75	1.85	CTP1506	5.10	3.1
2N250	2.75	1.85	CTP1508	3.70	2.
2N255	1.20	.80	CTP1530	15.00	9.5
2N256	1.35	.90	2N1011	6.50	4.
2N257	2.75	1.85	2N1120	18.00	12.
2N257Gr	2.75	1.85	2N1136	2.70	1.
2N257Bl	3.00	2.05	2N1137	3.15	2.
2N257Wh	3.25	2.25	2N1138	3.60	2.
2N268	4.00	2.65	2N1146	4.50	3.
2N268A	4.00	2.65	2N1146A	5.25	3.
2N297A†	7.50	6.25	2N1146B	12.00	8.
2N297‡	6.35	4.25	2N1146C	18.00	12.
2N297A‡	4.00	3.10	2N1147§	4.50	3.
2N301	2.75	1.85	2N1147A§	5.25	3.
2N301A	4.50	3.00	2N1147B§	12.00	8.
2N375	5.55	3.70	2N1147C§	18.00	12.
2N379	4.00	3.10			

*Matched pair. †Military. ‡Commercial §With solder lugs instead of pins.

arkes
arzian® INC

Silicon Rectifiers

J-1 SERIES (FIG. A)

	Jetec No.	Max. PIV	Max. RMS Volts	Max. Cur., Amps at 100° C*			Net Each 1-9
				DC Load	Recur. Peak	4MS Surge	
	1N1617	100	70	1.5	10	100	$ 3.52
	1N1618	200	140	1.5	10	100	4.23
	1N1619	300	210	1.5	10	100	4.97
	1N1620	400	280	1.5	10	100	5.90

J-2 SERIES

r to Fig. A but with 10-32 threaded stud and one lead.

	1N1621	100	70	10	50	80	$ 3.52
	1N1622	200	140	10	50	80	4.23
	1N1623	300	210	10	50	80	4.97
	1N1624	400	280	10	50	80	5.90

H SERIES

	....	100	70	0.5	7.5	75	$ 1.10
	1N2485	200	140	0.5	7.5	75	1.16
	1N2486	300	210	0.5	7.5	75	1.25
	1N2487	400	280	0.5	7.5	75	1.40
	1N2489	500	350	0.5	7.5	75	1.50
	1N2490	600	420	0.5	7.5	75	1.85

K SERIES (FIG. B)

	1N1439	100	70	0.5	7.5	30	$ 1.20
	1N1440	200	140	0.5	7.5	30	1.26
	1N1441	300	210	0.5	7.5	30	1.35
	1N1442	400	280	0.5	7.5	30	1.50
	1N2088	500	350	0.5	7.5	30	1.65
	1N2089	600	420	0.5	7.5	30	2.00

L SERIES (FIG. C)

A	1N1085	100	70	2.0	30	100	$ 3.72
A	1N1086	200	140	2.0	30	100	4.15
A	1N1087	300	210	2.0	30	100	4.65
A	1N1088	400	280	2.0	30	100	6.08

M SERIES (FIG. C)

	1N1081	100	70	.500	5.0	30	$ 1.20
	1N1082	200	140	.500	5.0	30	1.26
	1N1083	300	210	.500	5.0	30	1.35
	1N1084	400	280	.500	5.0	30	1.50
0	1N1084	400	280	.500	5.0	30	1.50
	....	500	350	.500	5	30	1.65
	....	600	420	.500	5	30	2.00

HIGH VOLTAGE SM SERIES (FIG. H)

	1N1108	800	560	.450	4.50	27.0	$ 4.28
	1N1109	1200	840	.425	4.25	25.5	6.43
	1N1110	1600	1120	.400	4.0	24.0	8.57
	1N1111	2000	1400	.375	3.75	22.5	10.70
	1N1112	2400	1680	.350	3.5	21.0	12.85
	1N1113	2800	1960	.325	3.25	19.5	15.00

TUBE REPLACEMENT SERIES (FIG. I)

ave rectifiers for rugged, dependable service. Type S-5019 netically sealed. Type S-5033 is half-wave replacement.

1A	1N1150A	1600	1100	750 ma	8000 ma	.....	$13.00
7	1N1237	1600	1100	750 ma	8000 ma	......	13.00
8	1N1238	1600	1100	750 ma	8000 ma	......	13.00
9	1N1239	2800	1950	500 ma	5000 ma	......	20.45
3	1N1262	4500	1600	250 ma	2500 ma	......	20.45
0	....	10000	....	.3	....	......	35.60
7	1N2490	1600	....	.5	5000 ma	......	13.00
1	1N2389	1600	....	.6	6000 ma	......	6.10

ost cases, based on proper heat sink to limit case temperature ° C.

LOW CURRENT SERIES

ost units for use where current drain does not exceed 150 ma. M-150 has ferrule mounting (Fi.g C): K-200 has axial (Fig. B).

0	....	360	260	.200	2000 ma	20	$ 0.90
0	....	360	260	.150	1500 ma	20	.90

HIGH CURRENT RAN, RAP SERIES (FIG. J)

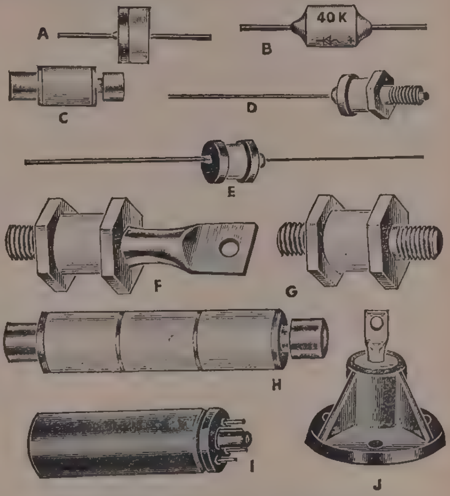
N indicates negative base; P, positive base.

N	1N1157	50	35	20	120	200	$ 4.90
N	1N1158	100	70	20	120	200	5.45
N	1N1159	200	140	20	120	200	6.10
N	1N1160	300	210	20	120	200	7.50
N	....	400	.....	20	....	......	8.25
P	1N1171	50	35	20	120	200	4.90
P	1N1172	100	70	20	120	200	5.45
P	1N1173	200	140	20	120	200	6.10
P	1N1174	300	210	20	120	200	7.50
P	....	400	....	20	....	......	8.25

HIGH CURRENT SAN, SAP SERIES (FIG. J)

N indicates negative base; P, positive base.

N	1N1161	50	35	35	210	350	$ 5.75
N	1N1162	100	70	35	210	350	6.90
N	1N1163	200	140	35	210	350	7.70
N	1N1164	300	210	35	210	350	9.10
N	....	400	......	35	......	......	9.70
	1N1175	50	35	35	210	350	5.75
	1N1176	100	70	35	210	350	6.90
	1N1177	200	140	35	210	350	7.70
	1N1178	300	210	35	210	350	9.10
	....	400	....	35	....	....	9.70



HIGH CURRENT VAN, VAP SERIES (FIG. J)

Suffix N indicates negative base; P, positive base.

S-T No.	Jetec No.	Max. PIV	Max. RMS Volts	Max. Cur., Amps at 100° C*			Net Each 1-9
				DC Load	Recur. Peak	4MS Surge	
5VAN	1N1165	50	35	100	600	1000	$12.75
10VAN	1N1166	100	70	100	600	1000	13.80
20VAN	1N1167	200	140	100	600	1000	15.75
30VAN	1N1168	300	210	100	600	1000	17.25
40VAN	....	400	......	100	....	......	21.70
5VAP	1N1179	50	35	100	600	1000	12.75
10VAP	1N1180	100	70	100	600	1000	13.80
20VAP	1N1181	200	140	100	600	1000	15.75
30VAP	1N1182	300	210	100	600	1000	17.25
40VAP	....	400	......	100	....	......	21.70

HIGH CURRENT WAN, WAP SERIES (FIG. J)

Suffix N indicates negative base; P, positive base.

5WAN	1N1263	50	35	150	900	1500	$12.75
10WAN	1N1264	100	70	150	900	1500	14.25
20WAN	1N1265	200	140	150	900	1500	20.25
30WAN	1N1266	300	210	150	900	1500	27.55
40WAN	....	400	......	150	....	......	31.05
5WAP	1N1267	50	35	150	900	1500	12.75
10WAP	1N1268	100	70	150	900	1500	14.25
20WAP	1N1269	200	140	150	900	1500	20.25
30WAP	1N1270	300	210	150	900	1500	27.55
40WAP	....	400	......	150	....	......	31.05

HIGH CURRENT XAN, XAP SERIES (FIG. J)

5XAN	1N1263A	50	35	200	1200	2000	$16.05
10XAN	1N1264A	100	70	200	1200	2000	17.40
20XAN	1N1265A	200	140	200	1200	2000	22.95
30XAN	1N1266A	300	210	200	1200	2000	27.20
40XAN	....	400	......	200	....	......	33.10
5XAP	1N1267A	50	35	200	1200	2000	16.05
10XAP	1N1268A	100	70	200	1200	2000	17.40
20XAP	1N1269A	200	140	200	1200	2000	22.95
30XAP	1N1270A	300	210	200	1200	2000	27.20
40XAP	....	400	......	200	....	......	33.10

HIGH CURRENT S3N, S3P SERIES

S-T No.		Max. PIV	Max. RMS Volts	Max. Cur., Amps at 100° C			Net Each 1-9
Neg. Base	Pos. Base			DC Load	Recur. Peak	4MS Surge	
5S3N	5S3P	50	35	35	210	350	$ 5.75
10S3N	10S3P	100	70	35	210	350	6.90
20S3N	20S3P	200	140	35	210	350	7.70
30S3N	30S3P	300	210	35	210	350	9.10
40S3N	40S3P	400	280	35	210	350	9.70

HIGH CURRENT V3N, V3P SERIES

5V3N	5V3P	50	35	100	600	1000	$12.75
10V3N	10V3P	100	70	100	600	1000	13.80
20V3N	20V3P	200	140	100	600	1000	15.75
30V3N	30V3P	300	210	100	600	1000	17.25
40V3N	40V3P	400	280	100	600	1000	21.70

HIGH CURRENT W3N, W3P SERIES

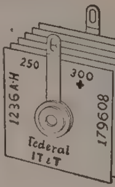
5W3N	5W3P	50	35	150	900	1500	$12.75
10W3N	10W3P	100	70	150	900	1500	14.25
20W3N	20W3P	200	140	150	900	1500	20.25
30W3N	30W3P	300	210	150	900	1500	27.55
40W3N	40W3P	400	280	150	900	1500	31.05

Rectifiers, Stacks, Capacitors

ITT SELENIUM RECTIFIERS, STACKS

HIGH DENSITY SELENIUM RECTIFIERS

Nearly 50% smaller than competing types; only six types handle 100% of all radio and TV replacement needs. Covers a range of from 65-100 ma to 600 ma. Excellent for original equipment use and in new design work as well as replacements. Average Shipping Weight, 5 oz.



ITT No.	Max. DC Ma	RMS v.	Net Ea.
1234AH*	65–75	130	**$0.66**
1235AH*	100–150	130	**.75**
1236AH*	250–300	130	**1.33**
1241AH*	350–400	130	**1.42**
1237AH*	450–500	130	**1.58**
1242AH*	550–600	130	**1.74**

*Eyelet construction, with mounting hardware.

STANDARD SELENIUM RECTIFIERS

Letter "A" placed after number indicates locking lug.

ITT No.	Max. DC Ma	Max. RMS Volts	Plate Size	Net Each
1159	20	130	3/8" diameter	**$0.75**
1002A*	65	130	1" square	**.77**
1003A*	75	130	1" square	**.83**
1004A*	100	130	1 13/64" x 1 9/32"	**1.00**
1101A*	100	130	1" square	**.86**
1005A*	150	130	1 13/64" x 1 9/32"	**1.08**

*Eyelet construction.

ASTRON SUBMINIATURE CAPACITORS

TYPE ML METALITE® TUBULARS

Astron
METALITE

Vacuum impregnated in a microcrystaline hydrocarbon wax for temperatures up to 65° C. Kraft paper tubes with soldered metal end-caps.

200 VOLTS DC WORKING

Astron No.	Capacity µf	Size, Inches Diameter	Size, Inches Length	Net Each
ML-2-01	.01	3/8	5/8	**$0.39**
ML-2-02	.02	3/8	5/8	**.39**
ML-2-03	.03	3/8	5/8	**.39**
ML-2-05	.05	3/8	5/8	**.39**
ML-2-1	.1	3/8	5/8	**.42**
ML-2-25	.25	15/32	5/8	**.54**
ML-2-5	.5	15/32	1 1/8	**.63**
ML-2-1M	1.0	9/16	1 1/8	**.78**
ML-2-2M	2.0	5/8	1 5/8	**1.08**

400 VOLTS DC WORKING

Astron No.	Capacity µf	Diameter	Length	Net Each
ML-4-01	.01	3/8	5/8	**$0.42**
ML-4-02	.02	3/8	5/8	**.42**
ML-4-03	.03	3/8	5/8	**.42**
ML-4-05	.05	15/32	5/8	**.42**
ML-4-1	.1	15/32	1 1/8	**.48**
ML-4-25	.25	9/16	1 1/8	**.60**
ML-4-5	.5	5/8	1 5/8	**.69**
ML-4-1M	1.0	23/32	2 1/8	**.96**

600 VOLTS DC WORKING

Astron No.	Capacity µf	Diameter	Length	Net Each
ML-6-01	.01	3/8	5/8	**$0.42**
ML-6-02	.02	3/8	5/8	**.42**
ML-6-03	.03	15/32	5/8	**.48**
ML-6-05	.05	15/32	5/8	**.48**
ML-6-1	.1	15/32	1 1/8	**.54**
ML-6-25	.25	5/8	1 1/8	**.66**
ML-6-5	.5	23/32	1 5/8	**.87**
ML-6-1M	1.0	23/32	2 1/8	**1.08**

ARGONNE ULTRAMINIATURE CAPACITORS

Hermetically sealed, electrolytics. Extra small, all aluminum design with double-anchored leads. For −22° C to +66° C. Plastic insulating sleeve.

Argonne No.	Cap., µf	WVDC	Dia. x L., In.	Net Each
AR-240	2	6	1/4 x 31/32	**26c**
AR-241	4	6	1/4 x 31/32	**26c**
AR-242	8	6	1/4 x 31/32	**29c**
AR-243	10	6	1/4 x 31/32	**29c**
AR-244	30	6	1/4 x 31/32	**29c**
AR-245	50	6	5/16 x 31/32	**31c**
AR-246	100	6	11/32 x 1 1/4	**39c**
AR-247	2	15	3/8 x 7/8	**29c**
AR-248	6	15	3/8 x 7/8	**29c**
AR-249	10	15	3/8 x 7/8	**29c**
AR-250	20	15	3/8 x 7/8	**29c**
AR-251	30	15	5/16 x 7/8	**29c**
AR-252	50	15	3/8 x 1 1/4	**31c**
AR-253	100	15	3/8 x 1 1/4	**45c**
AR-254	2	25	3/8 x 7/8	**29c**
AR-255	6	25	3/8 x 7/8	**29c**
AR-256	10	25	3/8 x 7/8	**31c**
AR-257	25	25	3/8 x 7/8	**31c**
AR-258	50	25	3/8 x 1 1/4	**35c**

SPECIAL PURPOSE RECTIFIERS

ITT No.	Max. DC Ma	Max. RMS Volts	Plate Size	Net Each
K1734	50	130	1 7/32" square	**$0.6**
1001*	75	20	1" square	**.4**
1007	75	160	1" square	**2.3**
1008	100	172	1 1/4" square	**2.8**
1014	100	160	1 9/32" max.	**1.5**
1015	150	25	1" square	**1.1**
1009	200	172	1 7/32" square	**3.8**
1016*	300	25	1 1/4" square	**1.3**
1017*	600	25	1 17/32" square	**1.5**
6H600A†	600	195	2" square	**3.0**
1013*	450	18	1 17/32" square	**.6**
1512*	1600	18	2 1/2" square	**2.2**

*Eyelet construction. †Color television type.

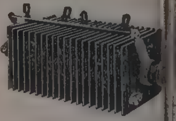
INDUSTRIAL RECTIFIER STACKS

Ratings for 35° C ambient; resistive or inductive loads.

ITT Code No.	DC Output Volts	DC Output Amps	Max. AC Input V.	Dimensions, In. L. x D. (± 1/16") x H.	Net Each
106C1SAX1	10	3.0	13	3 x 1 1/2 x 3	**$ 4.8**
133C1SAX1		6.0		4 x 1 3/4 x 4	**6.0**
136C1AX1		12.0		6 x 1 3/4 x 5	**9.6**
106B1SAX1	20	3.0	26	3 x 2 1/16 x 3	**7.5**
133B1SAX1		6.0		4 x 2 11/16 x 4	**9.5**
136B1AX1		12.0		6 x 2 3/4 x 5	**14.0**
106B2SAX1	40	3.0	52	3 x 3 9/16 x 3	**11.3**
133B2SAX1		6.0		4 x 5 x 4	**14.2**
136B2AX1		12.0		6 x 5 1/4 x 5	**23.0**
106B3SAX1	60	2.6	78	3 x 4 1/2 x 3	**15.3**
139B5AX1	100	1.0	130	2 x 5 3/8 x 2	**11.3**
106B5SAX1		2.4		3 x 6 5/8 x 3	**23.2**
103B6AX1	120	0.3	156	1 1/4 x 4 3/4 x 1 1/4	**8.9**
104B6AX1		0.6		1 1/2 x 4 7/8 x 1 1/2	**10.1**
139B6AX1		1.0		2 x 6 7/16 x 2	**13.0**

RADIO RECEPTOR SELENIUM RECTIFIER

"PETTI-SEL" SELENIUM RECTIFIERS



Single phase, full wave, industrial-type power units. Ratings listed are for stacks mounted with cells in vertical position and with normal convection cooling (ambient temperature of 35° C with a resistive or inductive load). Est. life: 100,000 hours. Special types on request. Mtg. brackets available for most models; write for prices.

R.R. No.	Output‡ V. DC	Outp. DC Amps.	Input‡ V. AC	Approximate Size, Inches† O.L.xC.H.xC.V.	Mounting Studs	Mounting Size	Ne Eac
D101§	0–10	0.4	26♯	1 7/8x1x1*	1	1 5/16"	$ 0.
D102§		1.5		1 7/8x1.6x1.6*	1	1 1/2"	1.
D103§		4.5		1 7/8x2.6x2.6*	1	1 1/2"	2.
D104§		8.0		3 11/16x3.9x3.9	1	2 1/2"	4.
D105§		16.0		3 11/16x7.8x3.9	2	2 1/2"	6.
D106§		24.0		4 3/16x11.82x3.9	3	2 3/4"	9.
D107§		32.0		4 3/16x7.87x7.87	4	3"	13.
D108*	0–21	.4	26	2 11/16x1x1	1	1 15/16"	1.
D109*		1.5		3 1/16x1.6x1.6	1	2 5/16"	2.
D110*		4.5		3 1/16x2.6x2.6	1	2 5/16"	4.
D111*		8.0		5 3/16x3.9x3.9	1	3 3/4"	7.
D112*		16.0		5 3/16x7.8x3.9	2	3 3/4"	12.
D113*		24.0		5 3/16x11.82x3.9	3	3 3/4"	18.
D114*		32.0		6 3/16x7.87x7.87	4	4 3/4"	24.
D115*	0–41	.4	52	3 5/8x1x1	1	2 7/8"	1.
D116*		1.5		4 9/16x1.6x1.6	1	3 13/16"	3.
D117*		4.5		4 9/16x2.6x2.6	1	3 13/16"	8.
D118*		8.0		7 3/16x3.9x3.9	1	5 3/4"	14.
D119*		16.0		7 3/16x7.8x3.9	2	5 3/4"	23.
D120*		24.0		7 3/16x11.82x3.9	3	6"	35.
D121*		32.0		9 3/16x7.87x7.87	4	7 15/16"	47.
D122*	0–63	1.5	78	5 13/16x1.6x1.6	1	5 1/16"	4.
D123*		4.5		5 13/16x2.6x2.6	1	5 1/16"	12.
D124*		8.0		9 3/16x3.9x3.9	1	8"	21.
D125*		16.0		9 3/16x7.8x3.9	2	8"	35.
D126*	0–84	1.5	104	7 9/16x1.6x1.6	1	6 13/16"	6.
D127*		4.5		7 9/16x2.6x2.6	1	6 13/16"	16.
D128*		8.0		11 11/16x3.9x3.9	1	10 3/16"	28.
D129*		16.0		11 11/16x7.8x3.9	2	10 3/16"	46.
D130*	0–106	.4	130	6 5/16x1x1	1	5 9/16"	3.
D131*		1.0		7 1/16x1.3x1.3	1	6 5/16"	5.
D132*		1.5		8 13/16x1.6x1.6	1	8 1/16"	7.
D133*		4.5		8 13/16x2.6x2.6	1	8 1/16"	19.
D134*		8.0		13 11/16x3.9x3.9	1	12 7/16"	35.
D135*		16.0		13 11/16x7.8x3.9	2	12 7/16"	57.
D136*	0–127	.4	156	7 1/16x1x1	1	6 5/16"	4.
D137*		1.0		8 1/16x1.3x1.3	1	7 5/16"	6.
D138*		1.5		10 5/16x1.6x1.6	1	9 9/16"	9.
D139*		4.5		10 5/16x2.6x2.6	1	9 9/16"	2
D140*		8.0		15 11/16x3.9x3.9	1	14 7/16"	4.
D141*		16.0		15 11/16x7.8x3.9	2	14 7/16"	6

‡Maximum. †Overall Length x Cell Horizontal x Cell Vert §Center-tapped circuit. *Bridge-type circuit. ♯Across outer leg center tap connection. *Uses one mounting bracket; all ot require two.

ransistor Transformers

ARGONNE TRANSISTOR TRANSFORMERS

Provide high power handling capacity, improved frequency response with minimum distortion. Nickel-steel laminations. Wound on nylon bobbins with Mylar outer wrap and color coded leads.

Any Argonne Model Number – Net Each......... **$2.95**

		Impedance, Ohms		Pri. DC Ma.‡	Power, Ma.	DC Ohms	
e	Type	Primary	Secondary			Pri.	Sec.
1†	Input	500,000	1,500 CT	0.3	350	3500	60
2†	Input	500,000	200 CT	.3	350	3500	20
3†	Input	250,000	200 CT	.5	350	3500	20
4†	Input	200,000	1,500 CT	.5	350	3000	65
0†	Input	200,000	1,000	0.5	100	3600	90
6†	Input	150,000	1,500 CT	2.	100	3700	55
1†	Input	100,000	3,000 CT	.5	100	3600	60
5†	Input	100,000	2,000 CT	.5	350	3000	50
2†	Input	100,000	1,500 CT	.5	100	3600	40
6†	Input	100,000	50	.5	350	3000	1.6
7†	Input	50,000	3,000 CT	1.	100	2000	50
8†	Input	50,000	1,500 CT	2.	100	3000	50
9†	Input	50,000	1,000	2.	100	2500	20
8*	Input	50,000	500 CT	1.	175	1300	20
9*	Input	50,000	200 CT	1.	175	1300	10
7*	Input	50,000	30 CT	1.	175	1300	1.5
0*	Input	40,000	100	1.	175	850	6
3†	Driver	20,000	2,000 CT	1.	100	400	50
4*	Driver	20,000	1,000	1.0	100	400	50
1*	Driver	20,000	800 CT	1.5	175	600	60
5†	Driver	20,000	400	1.	100	600	30
0*	Output	20,000	8	.5	100	400	0.6
1*	Output	20,000	3.2	.5	100	400	0.3
5*	Driver	16,000	4,000	1.	100	620	350
2*	Driver	15,000	200 CT	1.5	175	550	10
7†	Driver	15,000	200	1.5	250	1000	20
3*	Driver	10,000	3,000 CT	.0	100	200	100
9*	Driver	10,000	2,000 CT	1.5	100	500	50
3*	Driver	10,000	200 CT	2.	175	400	10
0*	Output	10,000	16	2.	150	600	2.5
2*	Output	10,000	8	1.	100	600	.6
8*	Output	10,000	3.2	1.	100	600	.3
3*	Input	5,000 CT	80,000	2.	175	350	1800

		Impedance, Ohms		Pri. DC Ma.‡	Power, Ma.	DC Ohms	
e	Type	Primary	Secondary			Pri.	Sec.
7*	Input	5,000	45,000	2.0	175	250	1600.0
6*	Input	5,000	30,000	2	175	150	1300
5*	Input	5,000	10,000	2.	175	150	450
4*	Input	5,000 CT	7,500 CT	2.	175	150	400
3†	Driver	5,000	3,000 CT	2.	350	200	90
1*	Output	5,000	100	1.	100	600	10
4†	Output	4,000 CT	8	4.	250	150	.8
5†	Output	4,000 CT	3.2	4.	250	150	.3
2†	Output	3,500	200	1	150	120	25
3*	Driver	3,000 CT	1,000	9.	150	100	60
4*	Output	2,500	11	10.	150	50	1.1
5†	Input	2,000 CT	8,000 CT	2.0	150	150	660
6†	Output	2,000	200	4.	250	120	20
5†	Driver	2,000	1,500 CT	2.	350	150	60
9*	Driver	1,500	500 CT	4.	175	100	20
6†	Output	1,000 CT	100	4.	250	120	10
7†	Output	1,000 CT	8	4.	250	120	.9
8†	Output	1,000 CT	3.2	4.	250	120	.3
0*	Output	800 CT	3.2	5.	175	40	.3
1*	Output	650 CT	16	5.	175	27	1.3
2†	Output	500 CT	500 CT	5.	350	18	18
3*	Output	500 CT	150 CT	5.	175	18	8
5*	Output	500 CT	50	5.	175	18	4
7*	Output	500 CT	30	5.0	100	20	1.5
8*	Output	500 CT	16	5.0	100	20	1.5
4*	Output	500 CT	8	5.	175	18	.8
9*	Output	500 CT	3.2	5.0	100	20	.3
6*	Output	400 CT	16	5.	175	16	1.3
0*	Output	400 CT	11	1.	150	20	.9
7*	Output	400 CT	8 or 3.2	5.	175	16	.6/.3
8*	Output	300 CT	16	6	175	12	1.4
1*	Output	300 CT	3.2	6.0	150	20	.25
9†	Output	250 CT	8	2	250	15	.7
2†	Output	250 CT	3.2	2.0	150	11	.3
3†	Input	200	2,000 CT	2.	150	11	50
4*	Output	200 CT	16	2.0	250	20	1.3
9*	Output	200 CT	8 or 3.2	7.	175	9	.6/.3
0*	Output	200 CT	3.2	2.	100	10	.3
0†	Output	160 CT	8 or 3.2	8.	350	10	.6/.3
6†	Output	125 CT	8	8.	350	4	.7
4†	Output	125 CT	3.2	8.	350	6	.3
1*	Output	100 CT	10 CT	10.	175	4	.8
2†	Output	48 CT	8 or 3.2	15.	350	2.3	.6/.3
5*	Input	3	4,000	15.0	250	14	50

1″ x ¾″ x ¾″. ***Size: ¾″ x ⅝″ x ⅝″.** ‡Unbalanced.

STANCOR TRANSISTOR TRANSFORMERS

ULTRA-MINIATURE ENCAPSULATED TRANSISTOR TRANSFORMERS

A complete line of production-engineered miniature transistor transformers, encapsulated for the highest reliability and accuracy. These units feature high power ratings, low distortion, high efficiency and excellent frequency response. Designed and built in accordance with MIL-T-27A specifications. Ratings match most popular transistors. Excellent for printed circuit applications. **Dimensions:** .312″ x .400″ x .426″. Weight (approx.), .125 oz.

No. UME-	Application	DC Ma#	Impedance, Ohms		DC Res. Ohms		Net Each
			Primary	Secondary	Pri.	Sec.	
11	Interstage	.5	20K	800	1500	185	$7.65
12	Output	3	500	50	120	13	5.40
13	Output	3	600 1000 1200	60 50 60	250	17	5.40
14	Output	3	600	3.2	70	.7	5.40
15	Output	2	1200	3.2	170	.75	5.40
16	Output	1	10K	3.2	1200	.7	5.50
17	Input	0	200K	1000	7500	260	8.10
18	Reactor	2	3 hys.*		1000		4.80
19	Output or Driver	1	10K CT 12,500 CT	500 CT 600 CT	1100	45	5.50
20	Driver	1	10K 12,500	1200 CT 1500 CT	1000	100	6.10
21	Driver	1	10K 12,500	2000 CT 2500 CT	1100	160	6.10
22	Single†	10	150 CT 200 CT	12 16	25	3	5.45
23	Single†	7	300 CT 400 CT	12 16	35	2.5	5.45
24	Single†	5	600 CT 800 CT	12 16	75	2	5.50
25	Single†	4	800 CT 1070 CT	12 16	85	2	5.50
26	Single†	3.5	1K CT 1330 CT	12 16	120	2	5.50
27	Single†	3	1550 CT 2K CT	12 16	225	2.5	5.50
28	Single†	1	7500 CT 10K CT	12 16	750	2.5	6.00
29	Output	7	300 CT	600	35	110	5.50
30	Output	5.5	500 CT	600	60	110	5.50
31	Output	4	900 CT	600	105	110	5.50
32	Output	3	1500 CT	600	200	120	5.50
33	‡	.5	20K CT 30K CT	800 CT 1200 CT	1500	175	6.50
34	Input	0	200K CT	1000 CT	6500	250	7.00
35	‡	1	10K CT 12K CT	1500 CT 1800 CT	1000	115	6.50
36	Reactor	2	6 hys.*	....	2600	......	5.45
37	Reactor	2	1 hy.*	....	190	......	4.80
38	Reactor	0	12 hys.§	....	1800	......	4.80
39	Reactor	0	20 hys.§	....	2700	......	5.50

*At 2 DC ma. †Or p-p output. ‡Interstage §At 0 DC. #In primary.

MINIATURE AUDIO TRANSFORMERS

A complete line of miniature audio transformers selected to match the most popular and commonly available types of transistors.

.150-Watt Group Dimensions: 13/16″ w x 5/8″ d x 3/4″ h. Mounting tabs: 25/32″ centers, 1/4″ w. Wt., .65 oz. Net Each **$3.72**

Stancor No.	Application	Impedance, Ohms		D.C. Resis., Ohms	
		Primary	Secondary	Pri.	Sec.
TA-18	Input	30 CT	50,000	14.7	4060
TA-19	Interstage	100 CT	10 CT	19	1.27
TA-20	Output	350 CT	4, 12	38	1.45
TA-21	Output	500 CT	4, 8, 16	75.3	3.55
TA-22	Interstage	500 CT	50	59.7	7.9
TA-23	Output	600 CT	4, 8, 16	73.2	3.2
TA-24	Interstage	500 CT	50,000	76.8	5135
TA-25	Output	825 CT	4, 8, 16	74	2.7
TA-26	Output	1,250	4, 12	132.5	1.4
TA-27	Interstage	1,200	20,000 CT	112	1860
TA-28	Interstage	1,500	500 CT	104	46.5
TA-29	Output	2,500	4, 16	370	2.3
TA-30	Interstage	5,000 CT	7,500 CT	650	790
TA-31	Interstage	5,000 CT	10,000 CT	635	1100
TA-32	Interstage	5,000 CT	80,000 CT	573	5740
TA-33	Output	10,000 CT	4, 8, 16	1174	2.6
TA-34	Interstage	10,000	200 CT	1200	33.4
TA-35	Interstage	10,000	2,000 CT	1200	257
TA-36	Interstage	10,000	3,000 CT	1200	385
TA-37	Output	400 CT	11	71.5	1.5
TA-38	Interstage	500 CT	150 CT	62	21.2

.300-Watt Group—Dimensions: 1 5/16″ w. x ¾″ d. x 13/16″ h. Mounting centers: 1⅛″. Weight, 1.2 oz. Net Each **$3.72**

Stancor No.	Application	Impedance, Ohms		D.C. Resis., Ohms	
		Primary	Secondary	Pri.	Sec.
TA-39	Output	100 CT	4, 8, 16	10.9	1.45
TA-40	Output	160	4, 8, 16	18.7	1.4
TA-41	Output	400 CT	4, 8, 16	34	1.5
TA-42	Output	500 CT	4, 8, 16	47	.85
TA-43	Output	700 CT	4, 8, 16	77	1.15
TA-44	Output	2,500	4, 8, 16	172	1.15
TA-45	Output	3,000	4, 8, 16	192	1.2
TA-46	Interstage	100,000	1,500 CT	3250	143
TA-47	Input	1,000 CT	200,000 CT	123	1815

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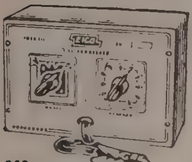
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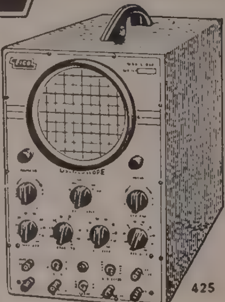
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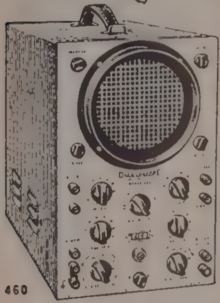
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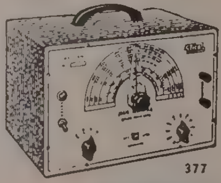
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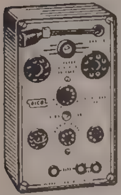
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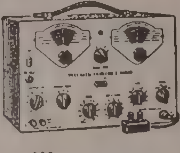
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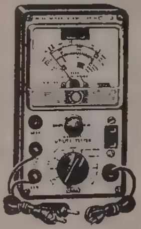
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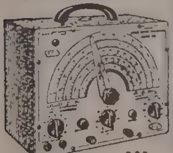
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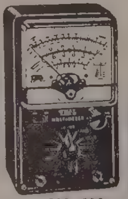
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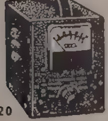
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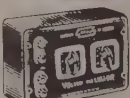
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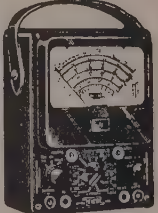
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MODEL 352 BAR GENERATOR

Operates on channels 2-6, 16-23 vertical bars (internally adjusted), and 13-22 horizontal bars (panel adjusted). Shows picture size and vertical and horizontal sync circuit stability. **Output:** 400,000 µv. Independent of station-transmitted signals.
Model 352 Bar Generator—Wired, ready to use. Net.. $19⁹⁵
Model 352-K Bar Generator Kit—Net Each........$14.95

MODEL 425 5" PUSH-PULL OSCILLOSCOPE

Push-pull output stages in both vertical and horizontal amplifiers for balanced vertical and horizontal deflection. Has applications in TV, radio, signal tracing, alignment, frequency and phase measurements and many other tests. Five-inch CRT. **Frequency Response:** Vertical, 5 cps to 500 kc, usable to 2.5 mc; horizontal, 5 cps to 500 kc. **Sensitivity:** Vertical, 0.05-.1 v. rms/in.; horizontal, 0.05-.15 v. rms/in. Input impedance, 1 meg., horizontal and vertical. **Sweep:** 15 cps-75 kc. Intensity modulated Z-axis. Direct connections to CRT plates.

Model 425 5" Oscilloscope—Wired, ready to use. Net Each.......................... $79⁹⁵
Model 425 5" Oscilloscope Kit—Net Each............$44.95

MODEL 460 DC WIDE BAND 5" OSCILLOSCOPE

For color, and monochrome TV, lab and industry. Flat from DC t 4.5 mc; usable to 10 mc; DC amplifiers. **Vertical Sensitivity:** 2 mv/in., push-pull throughout. **Sweep Frequency:** 10 cps to 100 k low sweep with external condenser. Automatic sync limiter an amplifier. Internally modulated saw-tooth output; 60 cps test signa external sync; external capacitor jacks. 60 cps variable phase sin sweep. Pre-set TV vertical and horizontal sweep positions. Four fre quency-compensated attenuator positions, up to 1,000:1 on eithe direct or capacitive-coupled input.
Model 460 5" Oscilloscope—Wired, ready to use. Net $129⁵
Model 460-K 5" Oscilloscope Kit—Net Each.........$79.9

MODEL 377 SINE AND SQUARE WAVE AUDIO GENERATO

Wien bridge tuning circuit. 1% resistors. **Frequency Range:** Si wave, 20-200,000 cps; square wave, 60-50,000 cps. **Repons** 60-150,000 cps, ±1½ db. Less than 1% distortion. **Hum:** Le than 0.4%. ±3% accuracy. **Output:** 10 v. across 1,000 ohn rated load (100 mw).
Model 377 Audio Generator—Wired. Net Each....... $49⁹
Model 377-K Audio Generator Kit—Net Each.......$31.9

MODEL 612 FILAMENT CONTINUITY TESTER

Permits fast filament testing of TV and radio tubes in an inopera tive series string. Adapter permits checking of 14, 12, and 8-p (110°) picture tubes. Checks bayonet and screw-type pilot lam plus cartridge fuses. Self-powered by internally contained ba teries. Checks 7- and 9-pin receiver tubes also.
Model 612 Filament Continuity Tester—Wired. Net Ea. $5⁹
Model 612-K Filament Continuity Tester Kit—Net Each$3.9

MODEL 368 TV-FM SWEEP AND MARKER GENERATOR

Electronic sweep circuit; linear on both sides of center frequenc new AGC circuit that automatically adjusts oscillator for ma mum output on each band with minimum amplitude variation **Sweep Generator Range:** 3-216 mc, five overlapping band **Sweep Width:** Continuously variable, 0-30 mc. **Marker Gene rator Bands:** Fundamental—2-6, 6-20 and 20-75 mc; calibrate harmonic—60-225 mc. Variable marker generator calibrated wi built-in crystal (4.5 crystal included). Provision for insertin external marker generator. Double pi isolation line filter. 0-10 logging scale.
Model 368 Sweep-Marker Generator—Wired. Net.. $119⁹
Model 368-K Sweep-Marker Generator Kit—Net Ea. $69.9

MODEL 540 UTILITY TESTER

AC/DC voltmeter, ammeter, ohmmeter, wattmeter and leaka tester. Rotary switch selector; one-place visual indicator. Instru tion book covers basic electricity as well as operation; also pr cedures and diagrams for common repairs.
Model 540 Utility Tester—Wired. Net Each.......... $15⁹
Model 540-K Utility Tester Kit—Net Each..........$12.9

MODEL 565 VOM

20,000 ohms/volt. 31 full-scale ranges. **DC/AC Volts:** 0-2.5, 10, 5 250, 1,000, 5,000. **DC Current:** 0-100 µa; 10, 100, 500 ma; 1 amps. **Ohms:** 0-2,000; 200K, 20 meg. **DB:** Five ranges, −12 t +55. 4½" 50 µa meter. Bakelite case.
Model 565 VOM—Wired. Net Each................ $29⁹
Model 565-K VOM Kit—Net Each..................$24.9
Model 555 VOM—1% resistors. Wired. Net Each...... 34.9
Model 555-K VOM KIT—1% resistors. Net Each..... 29.9

MODEL 536 VOM

1,000 ohms/volt. **AC/DC Volts:** 0-1, 5, 10, 50, 100, 500, 5,00 **AC/DC Current:** 0-1, 10 ma; 0.1, 1.0 amp. **Ohms:** 0-5,000, 100 1 meg. **DB:** Six ranges, −20 to +69. 3" 400 µa meter. High impe bakelite case.
Model 536 VOM—Wired, ready to use. Net Each..... $14⁹
Model 536-K VOM Kit—Net Each..................$12.9
Model 526 VOM—With 1% resistors. Wired. Net Ea.. 16.9
Model 526-K VOM Kit—With 1% resistors. Net Ea... 13.9

MODEL 360 TV/FM SWEEP GENERATOR

Covers all VHF TV/FM Channels and IF frequencies: 500 kc 228 mc on fundamentals. Continuous sweep width control, 0- mc. Crystal marker oscillator. Variable phasing of 60 cps outpu Provision for external marker injection. Crystals not incl. $49⁹
Model 360 TV/FM Sweep Generator—Wired. Net....
Model 360-K TV/FM Sweep Generator Kit—Net Each $34.9
C5 or C4.5 Mc Crystals—Specify. Net Each.......... 3.9

MODEL 495 OSCILLOSCOPE VOLTAGE CALIBRATOR

Enables p-p v. measurement of TV sweep, calibration of vertic and horizontal scope amplifiers, etc. Output variable from zero every range; full-scale readings—0.1, 1, 10 and 100 v. p-p at ±5 accuracy. VR tube regulated power supply.
Model 495 Oscilloscope Calibrator—Wired. Net...... $17⁹
Model 495-K Oscilloscope Calibrator Kit—Net Each..$12.9

MODEL 566 VOM (NOT ILLUS.)

1,000 ohms/volt. 38 full-scale ranges. AC/DC Volts, DC Curren and DB ranges: Similar to Model 536. **Ohms:** 0-500, 100 K 1 meg. 4½" 400 µa meter. Bakelite case.
Model 566 VOM—Wired. Net Each................. $18⁹
Model 566-K VOM Kit—Net Each..................$14.9
Model 556 VOM—1% resistors. Wired. Net Each...... 23.5
Model 556-K VOM Kit—1% resistors. Net Each...... 16.9

MODEL 1020 TRANSISTORIZED POWER AND BIAS SUPPL

A completely transistorized, low-ripple, continuously variab DC power and bias supply. Two 2N256 power transistors perm output voltages up to 30 v. Maximum load current, 300 m Maximum ripple (120 cps) at full load, only 1/200 of 1%.
Model 1020 Transistorized Power and Bias Supply— Wired. Net.................................... $27⁹
Model 1020-K Transistorized Power and Bias Supply Kit - Net Each......................................$19.9

EICO LABORATORY PRECISION INSTRUMENTS & KITS

MODEL 488 ELECTRONIC SWITCH

'8 you to observe two patterns on one scope simultaneously: pare voltage and current, amplitudes, waveforms, frequency phase relationships. Continuously variable switching rates less than 10 cps to over 2 kc. Use as square wave generator me range.

el 488 Electronic Switch—Wired. Net Each...... $39.95
el 488-K Electronic Switch Kit—Net Each.......$23.95

MODEL 584 BATTERY TESTER

ides true dynamic test of A and B portable radio type, hearing antern, radiation counter and electronic equipment batteries or out of equipment. Spare position adapts for other types.

el 584 Battery Tester—Wired. Net Each.........$12.95
el 584-K Battery Tester Kit—Net Each.......... 9.95

MODEL 625 TUBE TESTER

all conventional and TV tubes. Tests new 600 ma filament string tubes. 10 individual lever-type element switches. 4½" r; 3-color scale; roll-chart. Line adjust control; protective oad bulb. Two grid caps; blank socket for future tubes; pilot test socket.

el 625 Tube Tester—Wired, ready to use. Net.... $49.95
el 625-K Tube Tester Kit—Net Each..........$34.95
el 625-C—Wired. In counter display case. Net Each 59.95
el 625-CK—Kit. In counter display case. Net Each 44.95
el CRA CRT Adapter—For testing CRT's. Net... 4.50

MODEL 666 TUBE AND TRANSISTOR TESTER

all transistors; reads both reverse collector current and nt amplification factor (Beta), using internal power supply. all receiving tubes, including 9-pin miniatures, subminia-color and monochrome CRT's. 10 six-position lever switches; ish-button switches. Large meter scale; roll chart; detachable cover.

el 666 Tube and Transistor Tester—Wired. Net $109.95
el 666-K Tube and Transistor Tester Kit—Net Ea. $69.95

MODEL 630 CATHODE RAY TUBE CHECKER

all types and sizes of TV picture and scope type CR tubes—t or in carton. Bridge measurement of peak beam current neon lamp as balance indicator. Balancing control calibrated tly in terms of tube condition. Detects opens and shorts.

el 630 CRT Checker—Wired, ready to use. Each.................................. $18.95
el 630-K CRT Checker Kit—Net Each..........$13.95

ODEL 950B R.C. BRIDGE AND R-C-L COMPARATOR

ge-type instrument reading directly: **Resistance:** 0.5 ohm to megs, 4 ranges; **Capacitance:** 10 $\mu\mu$f to 5,000 μf, 4 ranges; r factor. (Kit includes precision calibrating resistor.) Unique arator range for R, C and L comparison measurement ist external standard. Leakage testing of all capacitors at WVDC with internal 0-500 v. DC source. Electron ray tube ith bridge balance and capacitor leakage indicator.

el 950B Bridge-Comparator—Wired. Net Each... $29.95
el 950B-K Bridge-Comparator Kit—Net Each....$19.95

EL 944 FLYBACK TRANSFORMER AND YOKE TESTER

ive check of all flybacks and yokes, in or out of set. Uses tive grid-dip principle to show up even one shorted strand. rate calibration for air- and iron-core flybacks. Checks any ctance of not too low Z as well as continuity. 4½" 50 μa r; 3 separate colored scale.

el 944 Flyback and Yoke Tester—Wired. Net Each. $34.95
el 944-K Flyback and Yoke Tester Kit—Net Each$23.95

MODEL 1050 BATTERY ELIMINATOR AND CHARGER

k bench 6 v. and 12 v. power supply for servicing vacuum tube oment. Similar to Model 1060, less special filter.

el 1050 Battery Eliminator and Charger—Wired. Each.................................. $38.95
el 1050-K Battery Eliminator and Charger Kit—Each.................................$29.95
el 1055 Accessory Filter—Heavy-duty L-C filter; permits Model 1050 to power transistorized equipment. d. Net Each $15.95
el 1055-K Accessory Filter Kit—Net Each.......$11.95

MODEL 1060 LOW RIPPLE BATTERY ELIMINATOR AND CHARGER (NOT ILLUS.)

'a-filtered DC power (0.3% AC ripple) for servicing trans-ized equipment. **Two Ranges:** 0-8 v., 10 a. cont., 20 a. inter.; v., 6 a. cont., 10 a. inter. Special built-in filter takes full con-ous and intermittent current output on both ranges. Variac transformer; fused primary; automatic reset overload relay is secondary. Separate voltmeter and dual-range ammeter; matic ammeter switching. Wide-angle vision, sloping panel, teel case; wall mounting feature optional.

del 1060 Battery Charger and Eliminator—Wired. Each $47.95
del 1060-K Battery Charger and Eliminator Kit—Each.....................................$38.95

MODEL 1100 EIA RESISTANCE BOX

rapid substitution of EIA resistance values, 15 ohms to megs in decade multiples of 15, 22, 33, 47, 68 and 100 ohms. standard 1 watt, ±10% EIA resistors.

del 1100 Resistance Substitution Box—Wired. Net... $9.95
del 1100-K Resistance Substitution Box Kit—Net...$5.95

MODEL 1120 EIA CAPACITANCE BOX

rapid substitution of EIA capacitance values, 0.0001 to μf in operating circuits; ±10% accurate. Uses silver mica molded plastic capacitors, conservatively rated at 600 v. -way jacktop binding posts.

del 1120 Capacitance Substitution Box—Wired. Net.. $9.95
del 1120-K Capacitance Substitution Box Kit—Net..$5.95

ODEL 1140 SERIES/PARALLEL R-C COMBINATION

aluable combination of Model 1100 resistance box and Model capacitance box. Permits selection of any resistance alone, capacitance alone, or any combination of either. Open circuit and short circuit positions are provided as well. Capacitance and resistance values are accurate within 10% from 0.0001 to 0.22 μf, and 15 ohms to 10 megohms.

Model 1140 Series/Parallel R-C Combination—Wired. Net Each.. $19.95
Model 1140-K Series/Parallel R-C Combination Kit—Net...$13.95

MODEL 1180 CAPACITANCE DECADE

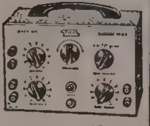
Precision silver-mica condensers (±1% accuracy, 500 v. DC rated), arranged in three decades—100 $\mu\mu$f to 0.111 μf, in steps of 100 $\mu\mu$f. Positive detent ceramic wafer switches with silver-plated contacts.

Model 1180 Capacitance Decade—Wired. Net Each... $19.95
Model 1180-K Capacitance Decade Kit—Net Each....$14.95

MODEL 1171 RESISTANCE DECADE

Wide range, versatile instrument covering 0-99,999 ohms in one ohm steps with five decades and ½% precision.

Model 1171 Resistance Decade—Wired. Net Each.... $24.95
Model 1171-K Resistance Decade Kit—Net Each.....$19.95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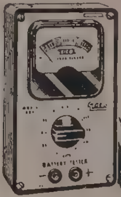
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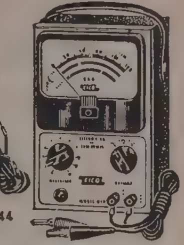
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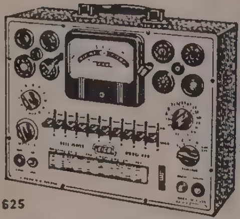
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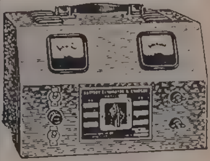
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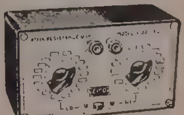
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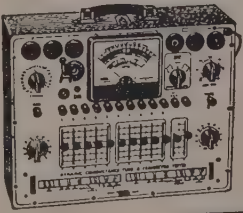
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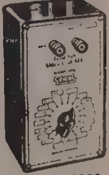
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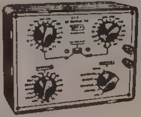
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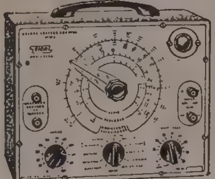
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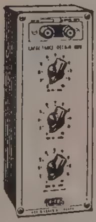
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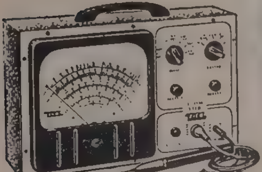
EICO LABORATORY PRECISION INSTRUMENTS & KITS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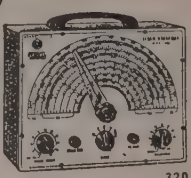
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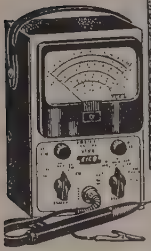
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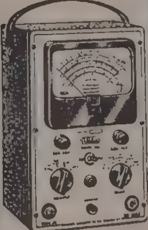
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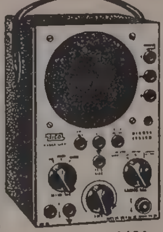
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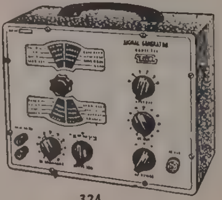
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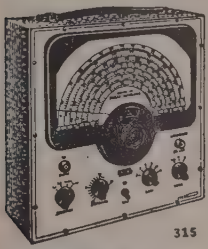
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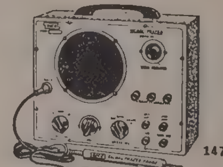
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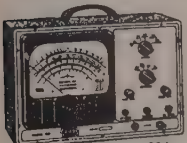
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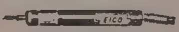
PTP-11
PRF-11
PD
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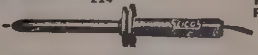
PSD


HVP-2

MODEL 249 DELUXE PEAK-TO-PEAK VTVM

Measures directly p-p voltage of complex and sine waves: 0-4, 14, 42, 140, 420, 1400, 4200. **DC/RMS Sine Volts:** 0-1.5, 5, 15, 50, 150, 500, 1,500 (up to 30,000 v. with HVP probe, and 250 mc with PRF probe). **Ohms:** 0.2 ohms to 1,000 megs. Seven non-skip ranges on every function. Calibration without removing from cabinet. 7½" meter with "can't-burn-out" circuit. 1% multipliers. Zero center. With AC/DC Uni-Probe: One probe for all functions—half-turn of probe tip selects DC or AC ohms. $59.95

Model 249 VTVM—Wired, ready to use. Net Each....
Model 249-K VTVM Kit—Net Each..................$39.95

MODEL 320 RF SIGNAL GENERATOR

For radio servicing, AM and FM I.F. alignment, checking RF stages; marker generator for TV alignment, 400 cps sine wave audio testing; laboratory and experimental work. Vernier tuning condenser. Hartley RF oscillator, range: 150 kc to 34 mc; calibrated harmonics to 102 mc. RF output attenuator. Colpitts oscillator, 400 cps sine wave output. Modulated or unmodulated RF output. Power supply with full-wave rectification. $29.95

Model 320 RF Signal Generator—Wired. Net Each...
Model 320-K RF Signal Generator Kit—Net Each....$19.95

MODEL 322 RF SIGNAL GENERATOR

All the precision features of Model 320, plus individual calibration of each of the five bands. $34.95

Model 322 RF Signal Generator—Wired. Net Each...
Model 322-K Signal Generator Kit—Net Each.......$23.95

MODEL 232 PEAK-TO-PEAK VTVM

Similar in functions to the Model 249, but with 4½" meter. With dual-purpose AC/DC Uni-Probe. $49.95

Model 232 VTVM—Wired, ready to use. Net Each....
Model 232-K VTVM Kit—Net Each..................$29.95

MODEL 221 VTVM

Large 4½" meter with "can't-burn-out" circuit. Zero center for TV/FM discriminator alignment. **AC/DC Volts:** 0-5, 10, 100, 500, 1,000 (up to 30,000 v. with HVP probe; up to 250 mc with PRF probe, and peak-to-peak with PTP probe). **Ohms:** 0.2 ohm to 1,000 megs. **DB:** −20 to +55. **Input R:** 25 megs. 1% precision multipliers. Double-triode bridge circuit. Three-color etched panel; steel case. $39.95

Model 221 VTVM—Wired, ready to use. Net Each....
Model 221-K VTVM Kit—Net Each..................$25.95
Leatherette Carrying Case—For Model 221. Net Each. 3.95

MODEL 145A MULTI-SIGNAL TRACER

High gain RF and low gain audio input channels for signal tracing and trouble shooting. Enough RF to trace up to receiver input. signal is heard through built-in 5" PM speaker. Individual panel receptacles for easy change-over from RF to audio tracing or vice versa. Noise localizer circuit applies DC test voltage through probe. May be connected as test speaker, amplifier, or output transformer. Output for VTVM or 'scope. $28.95

Model 145A Multi-Signal Tracer—Wired. Net Each...
Model 145A-K Multi-Signal Tracer Kit—Net Each....$19.95

MODEL 315 DELUXE RF SIGNAL GENERATOR

1% accuracy on all seven stages. **Frequency:** Fundamentals 75 kc to 50 mc in five ranges. Calibrated harmonics 13 mc to 150 mc in two ranges. **RF Output:** Over 100,000 μv. **Audio Modulation Frequency:** 400 cps. VR tube regulated power supply. Internal 400 cps sine wave audio generator with attenuator RF modulation and external audio testing. Provision for external modulation. $59.95

Model 315 Deluxe RF Signal Generator—Wired. Net.
Model 315-K Deluxe RF Signal Generator Kit—Net..$39.95

MODEL 324 RF SIGNAL GENERATOR

IF-RF alignment, signal tracing and trouble-shooting of TV, FM, and AM sets on all fundamentals; marker generator. 400 cps sine wave audio testing. Also for lab and experimental work. **Extended Frequency Range:** Six fundamental bands: 150-400 kc, 400-1,200 kc, 1.2-3.5 mc, 3.5-11 mc, 11-37 mc, 37-145 mc; harmonic band 111 mc-435 mc. ±1.5% frequency accuracy. Colpitts RF oscillator, directly plate-modulated by cathode follower. Variable depth of internal modulation, 0-50% by 400 cps Colpitts oscillator Variable gain external modulation amplifier; 3 v. needed for 30% modulation. Fine and coarse (3-step) RF attenuators; 50-ohm output impedance. $39.95

Model 324 RF Signal Generator—Wired. Net Each...
Model 324-K RF Signal Generator Kit—Net Each....$26.95

MODEL 214 VTVM

All the versatility and proven features of Model 221, plus a big 7½" meter. $54.95

Model 214 VTVM—Wired, ready to use. Net Each....
Model 214-K VTVM Kit—Net Each..................$34.95

MODEL 147 DELUXE MULTI-SIGNAL TRACER

For RF/IF/audio signal tracing and trouble-shooting on AM/FM/TV sets. Separate high gain RF and low gain audio input channels. Magic-eye monitors both channels, plus speaker for easier estimation of signal strength and gain per stage. High RF sensitivity permits signal tracing to receiver input. Shielded RF demod and audio probes provided. Noise locator circuit applies DC test voltage to component, amplifying effect. Calibrated wattmeter. $39.95

Model 147 Multi-Signal Tracer—Wired. Net Each....
Model 147-K Multi-Signal Tracer Kit—Net Each.....$24.95

MODEL HVP-2 HIGH VOLTAGE PROBE

For safe measurement up to 30,000 v. DC with any VTVM or 20,000 ohms/volt VOM. Includes choice of high quality multiplier resistor to match most popular instruments. $4.95

Model HVP-2 High Voltage Probe—Wired. Net Each...
Model HVP-1 High Voltage Probe—Similar uses as HVP-2; supplied with matching resistor for your instrument. Net....$6.95

MODEL PTP-11 PEAK-TO-PEAK VTVM PROBE

Reads p-p voltages directly on DC scales of VTVM. Traces complex AC waveforms through TV deflection systems. $6.95

Model PTP-11—For use with 11 meg VTVM. Wired. Net.
Model PTP-11-K Kit—For 11 meg VTVM. Net Each...$4.95
Model PTP-25—For 25 meg VTVM. Wired. Net........ 6.95
Model PTP-25-K Kit—For 25 meg VTVM. Net Each... 4.95

MODEL PRF-11 RF VTVM PROBE

For RF voltage measurements up to 250 mc, ±10% accurate.

Model PRF-11—For 11 meg VTVM, wired. $4.95
Net Each..
Model PRF-11-K Kit—For 11 meg VTVM. Net Each...$3.75
Model PRF-25—For 25 meg VTVM, wired. Net Each... 4.95
Model PRF-25-K Kit—For 25 meg VTVM. Net Each... 3.75

MODEL PD OSCILLOSCOPE DIRECT PROBE

For TV waveform tracing in low Z or low frequency circuits Eliminates strap pickup and signal re-radiation. $3.95

Model PD Probe—Wired. Net Each.....................
Model PD-K Probe Kit—Net Each....................$2.75

MODEL PSD OSCILLOSCOPE DEMODULATOR PROBE

For signal tracing and checking of TV and radio RF and IF stages Demodulates amplitude modulated carriers between 150 kc and 250 mc. $5.75

Model PSD Probe—Wired, ready to use. Net Each......
Model PSD-K Probe Kit—Net Each...................$3.75

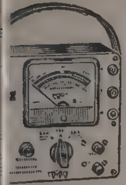
MODEL PLC OSCILLOSCOPE LOW CAPACITY PROBE

For TV waveform tracing in high Z and high frequency or wide-band circuits. $5.75

Model PLC Probe—Wired, ready to use. Net Each......
Model PLC-K Probe Kit—Net Each...................$3.75

TRIPLETT Quality Test Instruments

MODEL 690-A TRANSISTOR TESTER



Provides leakage and gain tests for all low and medium power p-n-p and n-p-n type transistors. Checks forward and reverse leakage of diodes. Leakage measured in 0-600 μa. Base to collector (Emitter open). Measures DC Beta from 5 to infinity. Using internal battery power supply with "off" position provided. Separate "Calibrate" and "Gain" buttons. Transistor socket and 26" external leads for any basing layout. Easy to use. Has 3.11" long scale; red, green and black markings on white. **Size:** 2½" x 5½" x 6". Wt., 2¼ lbs. with self-contained batteries.
Triplett Model 690-A—Net Ea.. $\$29^{50}$

MODEL 310 COMPLETE MINIATURE V-O-M

proof selector switch. Probe-A-Test pro-
s that third hand when testing away from
bench. Interchangeable probe tip fits in
of tester to become the common probe; the
leads connect together to form a 48" test
. Self-shielded for testing in strong mag-
field. Printed circuit. **Accuracy:** Meter:
% DC and ±4% AC. Components: ±2%
rument, ±1% resistor, ±1% rectifier.
e: 2⅛" top arc, black (DC) and red (AC)
white. **Ranges:** DC volts, 0-3-12-60-300-
) at 20,000 ohms/volt. AC volts, 0-3-12-60-300-1200 at 5000
s/volt. DC Microamps, 0-600 at 250 mv. DC Milliamps, 0-6-
00 at 250 mv. Ohms, 0-20,000-200,000 (200-2000 center scale).
ohms, 0-2-20 (20,000-200,000 center scale). **Size:** 2¾" x 4¼"
$\frac{}{16}$". Weight, approx. 14 oz. with self-contained batteries. With
leads and full instructions and output chart.
lett Model 310 Miniature V-O-M—Net Each..... $\$34^{50}$

MODEL 666-R POCKET VOLT-OHM-MILLIAMMETER

Unit construction—resistors, shunts, rectifier, batteries are housed in molded base integral with switch. Single switch selects any range. Recessed knob flush with panel. Precision wire-wound or film resistors. 3" 0-200 milliammeter, 250 mv. Banana jacks at top of panel reduce possibility of leads falling over the panel and meter dial. All connectors, knobs and controls are flush with the panel. Precalibrated rectifier unit for easy replacement. Streamlined, black molded case is completely insulated. $3\frac{1}{16}$" x 5⅜" x $2\frac{9}{16}$". Engraved white markings.

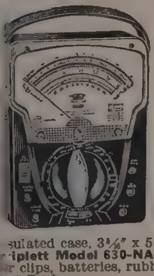
Volts: 0-10-50-250-1000-5000 at 1000 ohms/volt. **AC Volts:**
)-50-250-1000-5000 at 1000 ohms/volt. **DC Milliamps:** 0-10-
at 250 mv. **DC Amps.:** 0-1 at 250 mv. **Ohms:** 0-3000-300,000.
gohm: 0-3. (Compensated Ohmmeter circuit). **Leads:** 50" long.
it prods with removable alligator clips at one end. Banana
e plugs at other end for connecting to tester jacks, give low
tact resistance at jacks.
iplett Model 666-R Pocket V-O-M—Net Each..... $\$29^{50}$

MODEL 666-HH
OCKET VOLT-OHM-MILLIAMMETER

mpact, pocket-size Volt-Ohm-Milliammeter
turing wide resistance ranges, maximum scale
dability and simplified switching. Precision-
de, it provides a complete "miniature lab"
voltage, resistance and current measurements.
nana-type jacks provide low contact resistance
d trouble-free plug-in connections. High
uracy assured on voltage ranges by special
istors, and on current ranges by 250 millivolt
ter. All scale markings black on white except
which is red on white. Black molded case,
$\frac{}{16}$" x 5⅜" x $2\frac{9}{16}$".

: **Volts:** 0-10-50-250-1000-5000 at 1000 ohms/volt. **AC Volts:**
0-50-250-1000-5000 at 1000 ohms/volt. **DC Milliamps:** 0-10-
)-500. **Ohms:** 0-2000-400,000 (12-2400 at center scale). Com-
te with batteries and 50" test leads. Wt., 1½ lbs.
iplett Model 666-HH Pocket V-O-M—Net Each.... $\$27^{50}$

MODEL 630-NA VOLT-OHM-MILLIAMETER



This super deluxe V-O-M offers 70 ranges. Frequency compensated from 35 cps to 20 kc. Temperature compensated. DC accuracy, 1½% full scale. Meter protected from overloads. Mirrored scale.

RANGES

DC Volts: 0-0.240-0.6-3-12-60-300-1200-6000 at 10,000 ohms per volt; 0-0.120-0.3-1.5-6-30-150-600-3000 at 20,000 ohms per volt. **AC Volts:** 0-3-12-60-300-1200-6000 at 5000 ohms per volt; 0-1.5-6-30-150-600-3000 at 10,000 ohms per volt. **DC Microamperes:** 0-120 at 240 mv.; 0-60-600 at 120 mv. **DC Milliamperes:** 0-1.2-12-120-1200 at 240 mv.; 0-6-60-600 at 120 mv. **DC Amperes:** 0-12 at 240 mv; 0-6 at 120 mv. **Ohms:** 0-1000-10,000-100,000. **Megohms:** 0-1-10-100. **DB:** −20 to +70. Molded,
sulated case, $3\frac{5}{16}$" x 5½" x 7½". Weight, 4 lbs.
iplett Model 630-NA V-O-M—Complete with 48" leads, alliga-
r clips, batteries, rubber feet and instruction manual. $\$74^{50}$
et Each.......................................

MODEL 630-PL VOLT-OHM-MILLIAMMETER

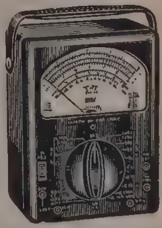
Wider spread scales in modern design. Measures 5-500,000 cps frequency response in AC. Voltage scales for reading by 10's. DC Polarity reversing switch. Can be used with clamp-on adapter. Compensated ohmmeter circuit. Flush-mounted controls; precalibrated rectifier.

RANGES

DC Volts: 0-2.5-10-50-250-1000-5000 at 20,000 ohms per volt. **AC Volts:** 0-3-10-50-250-1000-5000 at 5,000 ohms per volt. **DB:** −20 to +75 (six ranges). **DC Microamps:** 0-100 at 250 mv. **DC Milliamps:** 0-10-100-1000 at 250 mv. **DC Amps.:** 0-10 at 250 mv. **Ohms:** 0-1000-10,000. **Megs.:** 0-1-100. **Output:** Condenser in series with AC ranges. Wt., 4 lbs.
Triplett Model 630-PL V-O-M—With leads, clips, batteries, manual. Net Each.................. $\$44^{50}$

Triplett Model 630-APL V-O-M—Same as 630-PL but with ½% resistors and mirrored scales. Net Each..... $\$54^{50}$

MODEL 630 VOLT-OHM-MILLIAMMETER



A beautiful streamlined instrument in a completely insulated, molded case that provides AC-DC volts, DC microamps, milliamps, amps, ohms, megs, db's and output readings. All DC scales black on white; AC and Ohms, red on white. 5½" meter has single switch which will select any range. Recessed knob flush with panel. Banana jacks for longer life and better contact. Unit construction—resistors, shunts, rectifier, batteries all housed in molded base integral with switch. $3\frac{7}{32}$" x 5½" x 7½" panel black molded with engraved white markings.

RANGES

DC Volts: 0-3-12-60-300-1200-6000 at 20,000 ohms per volt. **AC Volts:** 0-3-12-60-300-1200-6000 at 5000 ohms per volt. **DB:** −20 to +70 (seven ranges). **DC Microamps:** 0 to 60 at 250 mv. **DC Milliamps:** 0-1.2-12-120 at 250 mv. **DC Amps:** 0-12 at 250 mv. **Ohms:** 0-1000-10,000. **Megs:** 0-1-100. **Output:** Condenser in series with AC volts. Weight, 4 lbs.
Triplett Model 630 V-O-M—Net Each............. $\$44^{50}$

Triplett Model 630-A V-O-M—Similar scale and size as Model 630. DC accuracy, 1½% to 1200 volts. Long mirrored scale to eliminate parallax. Net Each.............. $\$54^{50}$

Triplett Model 630-T V-O-M—Designed for telephone maintenance. DC accuracy, 2%. Fused circuit protects resistors and meter in ohms ranges. **DC Volts:** 0-0.3-3-12-60-300-600 at 20,000 ohms per volt. **AC Volts:** 0-3-12-60-300-600 at 3,000 ohms per volt. **Ohms:** 0-1000-10,000-100,000. **Megohms:** 0-1-10. **DC Microamperes:** 0-60 at 150 mv. **DC Milliamperes:** 0-1.2-12-120 at 150 mv. Banana jack connectors; neck strap; insulated case. $3\frac{7}{16}$" x 5½" x 7½". Weight, 4 lbs. Net Each.... $\$54^{50}$

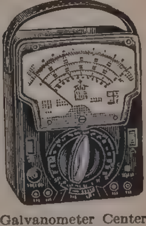
MODEL 650 VACUUM TUBE VOLTMETER

Reads AC rms Peak-to-Peak and RF to 150 mc in one probe. Separate 1 v. AC and 5 v. AC scales. 5½" meter flush with front panel. Single recessed range selector switch.

RANGES

DC Volts: 0-1-5-10-50-100-500-1000. **AC Volts:** 0-1-5-10-50-100-500. **Peak-to-Peak Volts:** 0-2.8-14-28-140-280-700 (Read on 0-1400 scale). Peak-to-Peak value of sine wave to 1400 volts. **Ohms:** 0-1000-10,000-100,000. **Megohms:** 0-1-100-1000. **Decibels:** Special tables in instruction book. Galvanometer Center mark "−0+" for discriminator alignment on all DC v. ranges −.5 to +.5 volt in 0-1 DC v. range. **Frequency Range:** A.C.R.F.; 15 cps to 150 mc at 30%. Weight, 5 lbs.
Triplett Model 650 VTVM—Net $\$89^{50}$

MODEL 631 COMBINATION VTVM-VOM

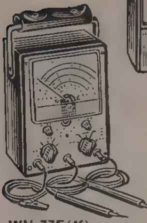


A Volt-Ohm-Milliammeter and a Vacuum Tube Voltmeter combined in one compact low-priced instrument. 34 ranges. Sensitivity: V-O-M: 20,000 ohms per volt DC, 5000 on AC. VTVM: 11 megohms. Single switch selects all ranges.

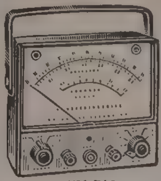
RANGES

Volt-Ohm-Milliammeter: DC Volts: 0-3-12-60-300-1200 at 20,000 ohms per volt. **AC Volts:** Same range at 5000 ohms per volt. **DC Microamperes:** 0-60 at 250 mv. **DC Milliamperes:** 0-1.2-12-120-1200 at 250 mv. **DC Amperes:** 0-12 at 250 mv. **Decibels:** −20, +4, +16, +30, +44, +56. **Ohms:** 0-1500-15,000 (6.8-68 center scale, first division 0.1). **Megohms:** 0-1.5-150 (6800-680,000 center scale). **Output:** Condenser in series with AC Volts.
Vacuum Tube Voltmeter: DC Volts: 0-1.2-6-30-120 (First division is 0.02 Volt). Galvanometer Center mark "−0+" for discriminator alignment. **Size:** 5½" meter housed flush with panel. $3\frac{7}{32}$" x 5½" x 7½" black molded case. **Leads:** 48" test prods, removable alligator clips at one end. 48" lead with 1 meg built in for VTVM. Banana type for low contact resistance. Pencil thin prods. Weight, 4 lbs.
Triplett Model 631 VTVM-VOM—Net Each......... $\$64^{50}$

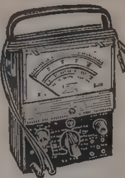
RCA Test Equipment



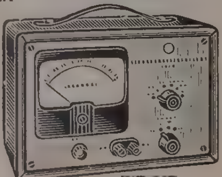
WV-77E(K)



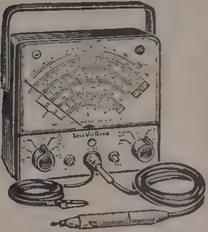
WV-74A



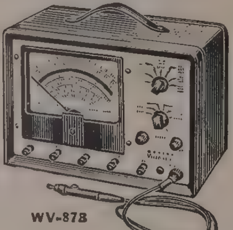
WV-38A



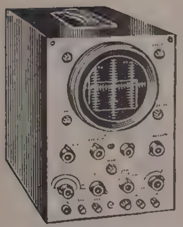
WR-44B



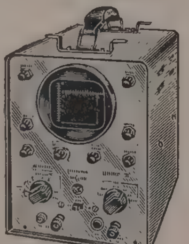
WV-98A



WV-87B



WO-91A



WO-33A(K)

MODEL WV-77E(K) VOLTOHMYST® KIT

New addition to the VoltOhmyst® series, available in kit or wired form. The laminated circuit board is keyed for accurate placement of components. Range switch has only two decks. Meter is electronically protected against burnout. Additional protection provided by a fused ohms-resistor network. Provides for stability under conditions of line voltage fluctuation. An additional circuit minimizes the effect of contact potential change. RF shielding metal case. Uses 1% tolerance resistors in voltage divider network. **AC Volts:** 0 to 1.5, 5, 15, 50, 150, 500, 1500, seven overlapping ranges. **Peak-to-Peak:** 0 to 4, 14, 40, 140, 400, 1400, 4000 volts, seven overlapping ranges. Accuracy, ±5% of full scale. Frequency response, flat within ±5%, from 40 cps to 5 mc on the 1.5, 5, and 15 volt rms ranges and the 4, 14, and 40 volt peak-to-peak voltage ranges. **DC Volts:** 0 to 1.5, 5, 15, 50, 150, 500, 1500 volts, seven overlapping ranges. Accuracy, ±3% of full scale. Center scale values, 10 ohms, 100 ohms, 1K ohms, 10K ohms, 100K ohms, 1.0 meg, and 10 megs. **Power Required:** 5 w. input, 105-125 volts, 50-60 cps. **Tubes:** 1-6AL5, 1-12AU7. **Battery:** 1-VS035. Hammertone finished; satin aluminum front panel with acid etched lettering. **Size:** 5⅝" w. x 4¾" d. x 7¾" h. Weight, 5 lbs.

Model WV-77E (K) VoltOhmyst® Kit—Net Each.... $29.95

Model WV-77E VoltOhmyst®—Factory wired and calibrated. Net Each.............................. $49.95

MODEL WV-74A AC VTVM

High sensitivity device measures voltages from 0.001 to 100 volts on large 6½" meter; voltages calibrated in rms values for a sine wave in 3:1 steps over nine ranges. Wide frequency response, flat within ½ db 20-500,000 cps on all ranges, is perfect for hi-fi and recorder applications; built-in amplifier may be used as preamp with panel binding posts provided; gain 38 db on 10 mv range with output impedance of 400 ohms. Sensitivity 200 µv per division on 10 mv range. High input resistance and low shunt input capacitance for minimum loading effect on sensitive circuits. Shielded probe cable eliminates stray pick-ups; die-cast aluminum case ha good shielding, takes hard use. Accuracy ±4% over full frequenc range within line-voltage range of ±10% from 117 volts. Mete linearity within 2% of full scale **Size:** 7" w. x 3¾" d. x 6½" h Power required: 35 watts, 105-125 v., 50-400 cps. WG-300B prob and input cable, supplied. Weight, 6 lbs.

Model WV-74A VTVM—Net Each.................. $99.50

MODEL WV-38A(K) VOLT-OHM-MILLIAMMETER

The basic instrument required for all types of electronic servicing now available in kit or wired form. High input resistance an extreme accuracy and an extra-large 5¼" meter scale offer extrem versatility. Two extra scales: 1-volt and 0.25-volt for transisto servicing applications. Clips on side hold probes and cable whe not in use. **AC Volts:** 0-2.5, 10, 50, 250, 1000, 5000 volts. Accuracy, ±5%; input resistance, 5000 ohms/volt; frequency response (reference 1000 cps) flat within ½ db from 10 cps to 50 kc on 2.5 10, 50-volt ranges. **DC Volts:** 0-0.25, 1.0, 2.5, 10, 50, 250, 1000 5000 volts. Accuracy, ±3%; input resistance, 20,000 ohms/volt **Ohm Ranges:** 0-2K ohms (12 ohms center); 0-200K ohms (120 ohms center); 0-20 megs. (120K ohms center). **DC Current:** 0-5 µa; 0-1 ma; 0-10, 0-100, 0-500 ma; 0-10 amps. Accuracy, ±3% Complete with internal batteries, ground lead and clip, positiv probe with slip-on alligator clip, and instruction booklet. Assembly instructions provided with WV-38A(K) kit. **Size:** 5¼" w. 3⅛" d. x 6⅞" h. Weight, 3½ lbs.

Model WV-38A VOM—Wired and tested. Net Each... $43.95

Model WV-38A(K) VOM Kit—Net Each.............$29.95

MODEL WV-84B DC MICROAMMETER

Battery operated vacuum tube microammeter measures current from 0.0002 µa; ratio 5,000,000:1. Damped movement for accurat reading. **Ranges:** 0-0.01-0.1-1, 0-10-100-1000 µa. **Size:** 9½" x 6¼ x 5¾" deep. Weight with batteries, 10 lbs. With two multipl resistors, instructions; batteries not included.

Model WV-84B Microammeter—Net Each........ $110.00

MODEL WV-98A NEW SENIOR VOLTOHMYST®

Most of the VoltOhmyst® features of WV-87B with same DC, A and ohmmeter ranges. Does not include DC current ranges. Larg 6½" meter. **Tubes:** 1-6AL5, 1-12AU7. **Battery:** 1-VS036. Alu minum case 6½" high x 7" wide x 3¾" deep. Consumes 5 watts o 105-125 volt, 50-400 cps AC. Weight, 6 lbs.

Model WV-98A Senior VoltOhmyst®—Net Each.... $79.50

MODEL WV-87B MASTER VOLTOHMYST®

Features 7½" meter, ±1% multiplier and shunt resistors, ±2 meter movement, zero-center scale adjust, DC polarity reversing switch and sturdy metal case. **DC Voltmeter:** RANGES: 0 to 1.5 5, 15, 50, 150, 500, 1500 volts; 11 megs input resistance; 7.3 meg sensitivity on 1.5 volts range; ±3% overall accuracy. **AC Voltmeter:** RANGES: (RMS) 0 to 1.5, 5, 15, 50, 150, 500, 1500 volts (Peak-to-peak) 0 to 4, 14, 42, 140, 420, 1400, 4200 volts; overa accuracy, ±3% full scale; frequency response from 30 cps to 3 m for source impedance of 100 ohms. **Ohmmeter:** 0.2 ohm to 100 megohms (7 ranges) Rx1, x10, x100, x1000, x10K, x100K, x 1 meg **DC Current Meter:** 0 to 0.5, 5, 15, 50, 150, 500 ma; 0 to 1.5, 1 amps; accuracy overall, ±3% full scale. **Tubes:** 2-6AL5, 1-12AU **Battery:** 1-VS036, 105-125 volts, 50-400 cps. Weight, 8 lbs. Complete with direct probe and cable, DC/direct probe, ohms prob and cable, positive current lead, negative current lead, ground lea and instructions.

Model WV-87B Master VoltOhmyst®—Net Each... $137.50

MODEL WO-91A OSCILLOSCOPE

Five-inch 'scope for color and black and white receivers Mult scale graph screen, scaled directly in volts, permits peak-to-pea voltage measurements as easily as with VTVM. Choice of wide band or high sensitivity. Freq. Resp.: (Ref. freq. 10 kc) Wideban pos., ±1 db 10 cps to 4.5 mc; Narrowband pos. within −1 d 10 cps to 0.5 mc within −6 db at 1.5 mc. Sensitivity: 0.05 p- volts per inch (0.053 rms volt in wideband). Voltage calibrated freq. compensated, 3-to-1 step attenuator for "V" amplifier. Simplified semi-automatic voltage calibration for simultaneous voltag measurement and waveshape display. Vertical-polarity revers switch. With WG-300B Direct/Low capacitance probe and cabl alligator clip, clip insulator, ground cable, green graph screen instructions. **Size:** 9" w. x 16½" d. x 13½" h.

Model WO-91A 5" Oscilloscope—Net Each......... $239.50

MODEL WO-33A(K) OSCILLOSCOPE

Compact three-inch 'scope that handles all black and white o color TV servicing problems. Increased gain and bandwidth en ables it to be used in PA, radio, TV, broadcast, ham radio, Hi-F laboratory and industrial applications. **Vertical Amplifier Sensitivity:** Wide band, 100 rms mv/inch; narrow band, 3 rms mv/inc **Vertical Amplifier Bandwidth:** Wide band, within −3 db, 5.5 cp to 5.5 mc; narrow band, within −3 db, 20 cps to 150 kc. **Sweep Circuit:** Sawtooth range, 15 cps-75 kc; Sync, external, ± interna line sweep, 160° adjustable phase; sync range, to 4.5 mc. Vertic circuit impedance at Lo-Cap cable input, 10 megs., 10 µµf (approx. **Power Required:** 105-125 v. AC, 50-60 cps, 50 watts. **Size:** 6½ w. x 10¼" d. x 8¾" h. Weight, 14 lbs. Complete with direct L Cap probe and cable, and instruction book.

Model WO-33A Oscilloscope—Factory wired and calibrated. Net Each.......................... $129.95

Model WO-33A(K) Oscilloscope Kit—Assembly instructions in cluded. Net Each...............................$79.95

MODEL WP-25A TV ISOTAP (NOT ILLUS.)

Efficient 500-VA autotransformer. Tests power transformer ty TV receivers; 275-VA isolated secondary tests transformerle types and AC radios. **Range:** 105-110-115-120-125-130 v. **Output** 105 v., 115 v. or 130 v. **Regulation:** Direct receptacles 1.5% isolated receptacles 6%. **Size:** 5¾" x 5" x 4⅜". Weight, 12 lb

Model WP-25A TV Isotap—
Net Each.................................. $22.00

RCA Test Equipment

ɔDEL WT-110A *AUTOMATIC* TUBE TESTER

ern, high-speed electron tube tester utilizing automation s. The "brain" or control center consists of a matrix made wo gold-plated printed circuit boards, interconnected by ated pins, springs and eyelets. Matrix activated by inserting ıed card and slipping the power lever into operation posi- his process sets up a proper combination of from 15 to 20 ; 50 sensitivity ranges; 10 bias voltages; five plate test s from 11 values of cathode resistors; two screen voltages; ter voltage combinations; socket connections up to 10 pins. ransconductance, gas, inter-element shorts, balance be- twin-tube sections. Tests each section of multi-section vith no paralleling of sections. Variable calibration com- s for varying line voltages. **Size:** 17¼″ w. x 13¼″ d. x Complete with cards, card punch, punching instructions ter information.

WT-110A Automatic Tube Tester—Net Each. $199.50

ᴍODEL WR-69A TV SWEEP GENERATOR

switch positions for all VHF TV channels, continuous tun- n 50 kc to 50 mc. High output voltage flat and free from ıs responses. Fundamental signals generated on all channels. blanking circuit produces zero reference line for quantita- ın measurements and balancing discriminator circuits. ontrolled sweep voltage at power-line frequency for 'scopes sweep and phase controls. Dual-piston attenuator with own to 5 µv. TV channels 2 to 13 preset. IF, 50 kc-50 mc for ıous tuning. Sweep width continuously variable for both IF ranges. Output, 0.1 v. rms min. Max. attenuator ratio: ,000:1; IF, 4000:1. Hor. phase sweep adjust. range, 160°. 3⅜″ w. x 7″ d. x 10″ h. Complete with RF output cable, eo output cable and instruction book.

WR-69A TV Sweep Generator—Net Each... $295.00

ODEL WR-61B COLOR-BAR GENERATOR

ecking overall operation of color TV receivers and for ad- and troubleshooting color phasing and matrixing circuits. es 10 bars of different color simultaneously, including R-Y, -Y, I and Q. Output signal consists of picture carrier, color ier, sync pulses and an unmodulated sound carrier. All ıcies crystal controlled. 189 kc pedestal, adjustable in ude. Luminance signals at edges of color bars. Sound carrier turned off to check for sound interference. RF and ± Video available: RF at least 0.01 v. p-p; video at least 0.25 v. p-p ns), 8 v. p-p (hi output). **Size:** 13½″ w. x 7½″ d. x 10″ h.

WR-61B Generator—With RF and Video out- ɔles, TV input adapter, manual. Net Each.... $259.50

EL WR-46A DOT/CROSSHATCH GENERATOR

ential instrument for color TV convergence adjustments, as color and black-and-white linearity adjustments. Provides vel video output signal for driving picture tube directly on leo amplifier in color and black-and-white receivers. Pro- table interlaced pattern of small, sharply defined dots for um convergence accuracy and a choice of vertical or hori- bars as well as a crosshatch pattern. Vertical bars adjustable 0 to 25; horizontal bars fixed at 15, only two scanning lines Fully adjustable output level. Uses sync from on-air signal ıre accurate scanning rate. Reversible polarity. All leads ıed. **Size:** 13½″ w. x 8″ d. x 10″ h.

WR-46A Dot/Crosshatch Generator—Net... $179.50

MODEL WR-99A MARKER GENERATOR

ıl calibrated generator; supplies fundamental frequency RF for aligning and trouble-shooting color and black-and- TV receivers, FM receivers, and other electronic equipment ing in the 19-260 mc range. Built-in 4.5 mc crystal calibra- terodyne detector, amplifier and speaker provide calibrating at 1 mc or 10 mc intervals through entire tuning range in bands. At least 0.1 v. output, into 95 ohms terminated; modulation input for re-transmission; dual markers for idth checks, RF alignment; triple markers for sound IF ıent and band-width checks; matched impedance/resistance -60 db in 5 db steps; vertical/horizontal linearity adjust- usable as heterodyne frequency meter. **Size:** 13½″ w. x 7″ d. h. Complete with output cable, two phone tips and in- ion book.

WR-99A Marker Generator—Net Each...... $242.50

ᴍODEL WR-49B RF SIGNAL GENERATOR

op and field use in radio, TV, etc., requiring a CW or modu- RF signal from 85 kc to 30 mc (6 ranges). For alignment and tracing in AM, FM receivers, alignment of low freq. TV Internal modulation by 400 cps oscillator or externally gh front panel connector. High and low output terminals and and fine adjustments for RF attenuator system. RF- ed by copper clad steel base. **Size:** 10½″ w. x 6¼″ d. x 7½″ mplete with shielded cable and instruction book.

WR-49B RF Signal Generator—Net Each..... $79.50

ɔDEL WA-44B AUDIO SIGNAL GENERATOR

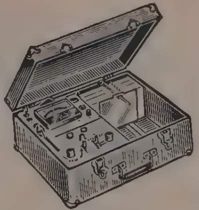
udio, radio, etc., requiring sinusoidal audio freq. up to 15 v. Output signal 11-100,000 cps made possible by rc-type ıtor controlled by delayed agc circuit. Output varies less than throughout tuning range. Total harmonic distort. 2% or less 15 kc. Hum level less than 0.1% of rated output. For high or circuits. Panel terminal provides 6 v. AC signal at line freq. termod. testing. With cable and manual.

WA-44B Generator—Net Each............ $107.50

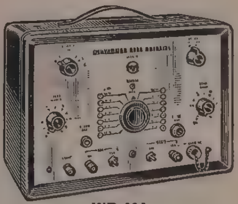
ᴍODEL WR-70A RF/IF/VF MARKER-ADDER

des sharp, narrow, easy to read markers for RF, IF and frequency alignment of color and black and white TV ers. Designed to be used with existing marker generators to choice of four markers having different shapes. Eliminates distortion of the marker and distortion of the sweep curve by the marker due to overloading or clipping by the TV receiver circuits. Front panel controls for marker shape, amplitude and polarity as well as the sweep-trace amplitude and polarity. **Size:** 10½″ w. x 6¼″ d. x 7½″ h.

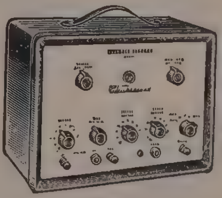
Model WR-70A RF/IF/VF Marker-Adder—Net Each. $74.50



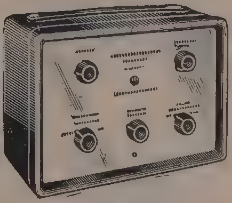
WT-110A



WR-69A



WR-61B



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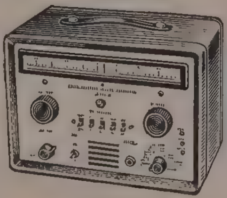
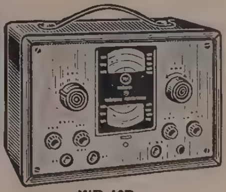
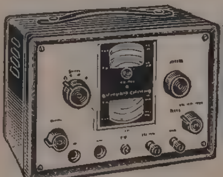


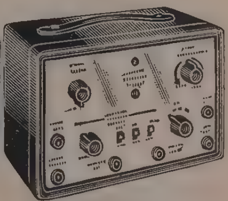
WR-99A



WR-49B



WA-44B



WR-70A

MODEL WG-307A TV BIAS SUPPLY

Designed for use in servicing and aligning color and black-and-white TV receivers. Provides four output voltages: Three separate output voltages, adjustable from 0 to −15 volts, for application in RF, IF, and AGC bias circuits: fourth output voltage, fixed at −100 volts, for use in the burst-keyer grid circuit of color-TV receivers during alignment tests of the chrominance circuitry. Power required, 105-125 v. AC, 60 cps.

Model WG-307A TV Bias Supply—Net Each......... $22.50

MODEL WG-295B VIDEO MULTIMARKER

An absorption-type marker device that provides seven simultaneous reference markers on a sweep response curve at factory set frequencies in the video range. Designed for sweep alignment and trouble-shooting of color TV receivers. Markers are provided at 0.5, 1.5, 2.5, 3.0, 3.58, 4.1 and 4.5 mc, each with its own "touch terminal", for checking Q and I filters, bandpass filter, color sub-carrier circuit, soundtrap, etc. Connects to sweep generator by means of 15″ coaxial cable.

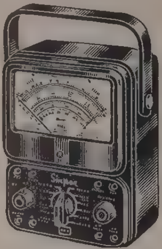
Model WG-295B Video Multimarker—Net Each..... $32.50

Simpson

INSTRUMENTS THAT STAY ACCURATE

Test Equipment

650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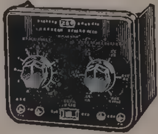

655

IMPROVED 260® VOM

- **Polarity Reversing Switch:** Makes DC measurements easier and faster, no lead reversal.
- **50 Microampere-250 Millivolt Range:** Gives more sensitive measurements. Provides complete current coverage in six easy steps.
- **Easier-to-Read Scales:** Black and red scales have been spread out for faster reading, less chance of error.
- **Less Circuit Loading:** Sensitivity of AC voltage ranges increased to 5,000 ohms/volt.
- **Popular DB Meter Ranges:** −20 db to +50 db, one milliwatt in 600 ohms.
- **Improved Frequency Response in AC Measurements:** 5 to 500,000 cycles/sec.
- **Full-Wave Bridge Rectifier System:** Provides more accurate AC voltage measurement.

Specifications: AC Volts: (5000 ohms/volt) 0-2.5-10-50-250-1000-5000; (with 0.1 μf internal series capacitor) 0-2.5-10-50-250. **DC Volts:** (20,000 homs/volts 0-250 mv; 0-2.5-10-50-250-1000-5000. **Ohms:** 0-25K-200K, 0-20 megs. **DC Current:** 0-50 μa; 0-1-10-100-500 ma; 0-10 amps. **DB:** −20 to +50 db in four ranges. **Size:** 5¼" x 7" x 3⅛". Shipping Weight, 6 lbs.

Simpson Model 260—Complete with test leads, Adjust-A-Vue handle and manual. Net Each........ ... ... **$43⁹⁵**

Simpson Model 260-RT—In roll-top case. Net Each........... .....**$49.95**

"ADD-A-TESTERS" MODEL 260 ADAPTER SERIES

Convert the Simpson Model 260 VOM into s different testers with a quality previously fo only in individual pieces of test equipment. plug in one adapter, and you have added an application; no complicated connections. Take ½ to ⅛ storage space of individual testers. combination of Add-A-Tester and 260 is self tained, self-powered. All adapters provide normal usage of Model 260 without disconne adapter.

MODEL 650 TRANSISTOR TESTER

Beta Ranges: 0-10-50-250, (F.S.). **Beta Accur** ±3%; with 260, ±5% nominal. **Ico Range:** 0 μa. **Ico Accuracy:** ±1%; with 260, ±3% (F
Simpson Model 650—
Net Each............................ **$26**

MODEL 651 DC VTVM

Voltage Ranges: 0-.5/1.0/2.5/5.0/10/25/50/ 250/500. **Accuracy:** ±1%; with Model 260, ± (F.S.). **Input Impedance:** Greater than 10 m all ranges.
Simpson Model 651—Net Each........ **$32**

MODEL 652 TEMPERATURE TESTER

Temperature Range: −50° F to +100° F, +10 to +250° F. **Accuracy:** With Model 260, ± (nominal). **Sensing Element:** Thermistor. T lead positions provided.
Simpson Model 652—Net Each........ **$38**

MODEL 653 AC AMMETER

Ranges: 0-0.25/1/2.5/12.5/25 amps. **Accur** ±1%; with 260, ±3% (nominal). **Freque Range:** 50 cycles to 3,000 cycles.
Simpson Model 653—Net Each........ **$18**

MODEL 654 AUDIO WATTMETER

Load Ranges: 4, 8, 16, 600 ohms. **Wattage:** Co uous—25 watts (8,600 ohms); 50 watts (4 ohms). Intermittent—50 watts (8,600 ohms); watts (4, 16 ohms). **Accuracy:** ±5%; with M 260, ±10% (nominal). **Direct Reading Scale:** F 17 microwatts to 100 watts.
Simpson Model 654—Net Each........ **$18**

MODEL 655 MICROVOLT ATTENUATOR

Ranges: 2.5 microvolts to 250,000 microvolts. tinuously variable in decade steps. **Frequency:** to 20 kc. **Accuracy:** ±1 db.
Simpson Model 655—Net Each........ **$18**

MODEL 656 BATTERY TESTER

Checks all radio and hearing aid batteries u 90 volts at the manufacturer's recommended l or any external load.
Simpson Model 656—Net Each........ **$19**

WE CARRY A COMPLETE LINE OF SIMPS TEST EQUIPMENT. PLEASE DO NOT HESIT TO WRITE FOR INFORMATION OR PRICES UNLISTED ITEMS.

PORTABLE LABORATORY EQUIPMENT

MODELS 9 AND 10

For inspection, lab and research work; feature 4½" hand drawn mirrored scales with knife edge pointer. **Model 9** DC meter with D'Arsonval movement: ±0.5% accuracy of full scale at 77° F. **Model 10** AC meter with iron vane movement: accuracy ±1%.

Range Volts	Net Ea. Models		Range Amperes	Net Ea. Model		Range	Net Ea. Models	
	9 (DC)	10 (AC)		9 (DC)	10 (AC)		9 (DC)	10 (AC)
50	$49.50	$43.95	5	$49.50	$43.95	1 ma	$57.15	......
100	49.50	43.95	15	49.50	43.95	50 ma	49.50	$43.95
150	49.50	43.95	30	49.50	43.95	100 ma	49.50	43.95
300	55.00	49.50	50	49.50	43.95	500 ma	49.50	43.95
15-150*	55.00	....	100	49.50	....	10-100 ma*	55.00	....
150-300*	60.45	55.00	2.5-5*	55.00	....	25-250 ma*	55.00	....
300-750*	66.00	60.45	5 -10*	55.00	....	100-500 ma*	55.00	....
15-150-300†	63.75	....	2.5-10-25†	60.45	....	50 μa#	71.55	....
150-300-600†	66.00	60.45	10 -25-50†	60.45	....	100 μa#	67.00	.....

*Double range. †Triple range. #Also available for 200 μa range. Net Each.. **$64.95**

9, 10

880

MODEL 880 AC-DC DYNAMOMETER TYPES

Accuracy ±1% of full scale at 77° F. Mirrored 4½" hand drawn scale with knife edge pointers.

VOLTMETERS

Maximum Volts	Net Each	Maximum Volts	Net Each
0-150	$60.45	0-75-150-300†	$76.95
0-150-300*	71.55	0-150-300-600†	76.95

*Double range. †Triple range.

In Roll-Top Safety Case—For Models 9, 10 and 880. Add to Net.. **$8⁰⁰**

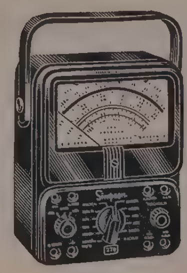
WATTMETERS

Amperes		Watts Range		Maximum Volts	Net Eac
Normal	Maximum	Low	High		
1	1.5	100	200	150-300	$60.4
2	3.0	200	400	150-300	60.4
5	7.5	500	1000	150-300	60.4
10	15.	1000	2000	150-300	60.4
20	30.	2000	4000	150-300	66.
50	75.	5000	10000	150-300	66.
2.5- 5*	3.75- 7.5	250- 500-1000		150-300	76.
5-10*	7.5 -15.0	500-1000-2000		150-300	76.

*Double current range.

Test Equipment

Simpson
ENTS THAT STAY ACCURATE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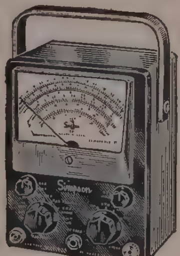
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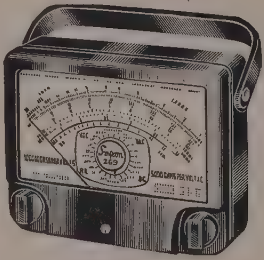
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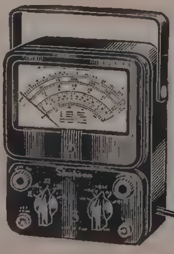
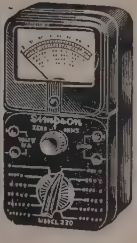
D


E

F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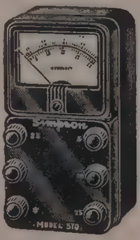
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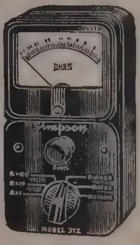

K

MODEL 270 AC-DC VOM (FIG. A)

ates all the features of Model 260, plus mirrored scale and
e pointer. Offers excellent repeatability and greater accu-
wide temperature range. **Current Accuracy:** (At 77° F
DC, 1½% (F.S.); AC, 2% (F.S.). **Resistance Accuracy:**
f arc. **AC Volts:** (5,000 ohms/volt) 0-2.5-10-50-250-1,000-
ith 0.1 µf internal series capacitor) 0-2.5-10-50-250. **DC**
),000 ohms/volt) 0-250 mv; 0-2.5-10-50-250-1,000-5,000 v.
tance, Ohms: 0-2K-200K, 0-20 megs. **DC Current:** 0-50
10-100-500 ma; 0-10 amps. **DB:** −20 to +50 db in four
ize: 5¼″ x 7″ x 3⅛″. Shipping Weight, 5½ lbs.
Model 270—Complete with leads and manual. $\$59^{95}$
1 . . . .
Model 270-RT—In roll-top case. Net Each . . . **$65.95**

MODEL 31T VTVM (FIG. B)

megohm DC input impedance reduces circuit loading.
: 0-1.5-5-15-50-150-500-1500. **Peak-To-Peak Volts:** 0-4-
)-400-1400-4000. **DC Volts:** Same as AC. **AF Volts:** (30
0 kc, ± 5%) Same as AC. **RF Volts:** (with probe) 50
) mc, 0-150 v. rms. DC Zero Center: −.75 0 + .75. **Ohms**
, X100, X1K, X10K, X100K, X1M. Line Voltage, 105-
r 220 v., 50/60 cps. **Size:** 7½″ x 5⅝″ x 4½″. Wt., 4½ lbs.
Model 311—With AC/DC ohms probe, ground $\$64^{95}$
operator's manual. Net Each . . . .
Model 0731—RF Probe. Net Each **$10.95**
Model 0732—High voltage probe. Net Each . . **10.95**

269 AC-DC VOLT-OHM-MICROAMMETER (FIG. C)

ded movement. Can replace VTVM's for many checks
hms/volt sensitivity. **AC Volts:** (5000 ohms/volt), 0-3-8-
00. **DC Volts:** (100,000 ohms/volt) 0-1.6-8-40-160-400-
0. **AF Output Volts:** 0-3-8-40-160. **Ohms:** 0-2K-20K-
2-20-200 megs. **DC Current:** 0-16-160 µa; 0-1.6-16-160
-16 amps. **DB:** −12 to +45.5 in four ranges. **Size:** 7¹⁵⁄₁₆″ x
″. Shipping Weight, 6 lbs.
Model 269—Complete with test leads, Adjust- $\$88^{00}$
andle and manual. Net Each . . . .

L 262 AC-DC VOLT-OHM-MILLIAMMETER

a 7″ scale, a self-shielded movement, and 33 ranges with a
y of 20,000 ohms/volt. **AC Volts:** (5,000 ohms/volt) 0-3-
-800. **DC Volts:** (20,000 ohms/volt) 0-1.6-8-40-160-400-
0. **AF Output Volts:** 0-3-8-40-160. **Ohms:** 0-500-5K-50K-
5-50 megs. **DC Current:** 0-80-160 µa; 0-1.6-16-160 ma;
amps. **DB:** −12 to +45.5 in four ranges. **Size:** 7¹⁵⁄₁₆″ x 6″
Similar in appearance to Model 269. Shpg. Wt., 6 lbs.
Model 262—Complete with test leads, Adjust- $\$59^{50}$
andle and manual. Net Each . . . .

MODEL 355 MIDGETESTER AC-DC VOLT-OHMMETER (FIG. D)

meter, small as a cigarette pack. Self-shielded movement
)00 ohms/volt sensitivity. **AC Volts:** 0-3-12-60-300-1200.
s: 0-3-12-60-300-1200. **Ohms:** 0-10K-100K; 0-1-10 megs.
″ x 4½″ x 1″. Weight, 7 oz.
Model 355—Complete with leads and manual. $\$34^{95}$
h . . . .

EL 303 VACUUM TUBE VOLT-OHMMETER (FIG. E)

as an electronic DC voltmeter, ohmmeter, AC or AF volt-
RF voltmeter (with accessory probe), output-meter, etc.
read 4½″ scale. Automatically protected against burn-out.
s: 0-1.2-12-60-300-1200. **DC Volts:** 0-1.2-12-60-300-1200.
s: 0-1.2-12-60. **RF Volts:** 20 v. maximum; frequency flat
100 mc. **Ohms:** 0-1K-100K; 0-1-10-1000 megs. **DB:** −20
in five ranges. Line voltage, 105-125 v. AC, 50-60 cps.
″ x 7″ x 3⅛″. Weight, 6 lbs.
Model 303—Complete with DCV probe, ACV-Ohms
round lead, Adjust-A-Vue handle and manual. $\$68^{00}$
h . . . .
Model 303-RT—In roll top case. $\$76^{00}$
h . . . .

EL 240 AC-DC VOLT-OHM-MILLIAMMETER (FIG. F)

io and appliance testing. Sensitivity, 1,000 ohms/volt.
ts: 0-15-150-750-3000. **DC Volts:** 0-15-75-300-750-3000.
0-3K-300K. **DC Current:** 0-15-150-750 ma. **Size:** 3″ x 5⅞″
Shipping Weight, 3 lbs.
Model 240—With leads and manual. Net Each $\$28^{95}$

EL 230 AC-DC VOLT-OHM-MILLIAMMETER (FIG. G)

io and appliance testing. **AC Volts:** (400 ohms/volt) 0-10-
0. **DC Volts:** (1,000 ohms/volt) 0-10-50-250-1000. **Ohms:**
0K. **DC Current:** 0-10-50-250 ma. **Size:** 3″ x 5⅞″ x 2½″.
g Weight, 3 lbs.
Model 230—With leads and manual. Net Each $\$27^{95}$

MODEL 370 AC AMMETER (FIG. H)

tained current transformer (use on 60 cps only) and indi-
nstrument. **Ranges:** 0-1-2.5-5-10-25 amps. **Size:** 3″ x 5⅞″
Shipping Weight, 3 lbs.
Model 370—Net Each . . . . $\$21^{95}$

ODEL 362 LOW-OHM-METER (FIG. J)

ccurate checks on low-current circuits. Reads from 0.1 to
across two ranges, 0-5 and 0-25. Full scale accuracy, 3%.
r checking motor armatures and fields, switch and relay contacts, resistances, industrial electrical equipment, shorts in TV and radio chassis wiring, between generator windings and ground, etc. Draws only 5 ma for long battery life; uses 1½-volt flashlight batteries. Sturdy black bakelite case, 3″ x 5⅞″ x 2½″.
Simpson Model 362 Complete with calibrated test $\$24^{95}$
leads. Net Each . . . .

MODEL 372 OHMMETER (FIG. K)

Features a wide range of measurements from 0.2 ohm to 50 megohms in six ranges. Center scale values: 5, 50, 500, 5K, 50K, 500K ohms.
Simpson Model 372—Complete with leads and manual. $\$27^{95}$
Net Each . . . .

67-59A

HICKOK Test Equipment

MODEL 121 CARDMATIC TUBE AND TRANSISTOR TESTER

Automatic, technician's portable with instantaneous, automatic high sensitivity shorts test. Heater to cathode leakage quantitatively indicated on meter. Measures: 320 heater voltages, 140 fixed bias potentials, 640 plate voltages, 640 screen voltages, 100 self-bias settings; 1000 quality-value sensitivity ranges. Accurately tests horizontal or vertical amplifier tubes for pulse operation. Includes 341 cards (capacity for 600). **Size:** 19¾" l., 13¼" w., 8" d. Shipping Wt., 40 lbs.

Model 121 Portable Cardmatic Tube and Transistor Tester—Net Each.................... $299.50

MODEL 123A CARDMATIC TUBE TESTER

Engineer's automatic "Cardmatic"; most accurate portable available. Ideal for lab or production line use. Permits special engineering tests to meet any exact tube specs. for special use. **Size:** 16½" w. x 9¼" d. x 19½" l. Includes 500 cards. Shipping Wt., 57 lbs.

Model 123A Engineer's Cardmatic Tube Tester —Net Each.................... $499.50

MODEL 6000 HIGH SPEED TUBE AND TRANSISTOR TESTER

High-speed, dynamic mutual conductance with instantaneous line adjust and automatic tube-short indication. Push-button for micromho readings. Push-button for gas test. Portable. **Size:** 11¾" l., 16¾" w., 7½" h. Shipping Wt., 21 lbs.

Model 6000 Portable—Net Each.................... $189.25

MODEL 800 PORTABLE TUBE AND TRANSISTOR TESTER

World's most popular portable; dynamic mutual conductance; 0-3000, 6000, 15,000 micromhos. Has 2.5 volt AC signal; 5" meter. Tests shorts, gas, future tube life, and transistors. **Size:** 16¾" w., 11¾" l., 7½" h. Shipping Wt., 21 lbs.

Model 800 Portable Tube and Transistor Tester—Net Each.................... $159.50

Model 800 Tester—Including CRT adapter and replaceable socket set (7, 8, 9-pin) and subminiature adapter (7-pin inline and octal). Net Each.................... $184.05

MODEL 820 TUBE CADDY PAL

Combination tube-transistor tester and VTVM-Ohmmeter. Designed to fit into standard tube caddy. Checks gas, grid emission, contact potential and leakage; also checks TV picture tubes (with CRT adapter) and transistors, including power types. **VTVM Ranges:** 0-1.5, 15, 150, 750 v. DC; Ohms, 100 ohm center scale, x1, x100, x10k. No batteries; built-in power supply; operates on 115 v. AC, 50-60 cps. **Size:** 8½" w. x 6" d. x 3½" h. Shipping Wt., 6 lbs.

Model 820 Tube Caddy Pal—Complete with three test leads. Net Each.................... $99.55

Model 820 With CRT Adapter—For testing all picture tubes, including 110° types. Net Each.................... $111.65

MODEL 770 5-INCH OSCILLOSCOPE

For general purpose industrial lab and TV uses. Wide band response DC to 5 mc; vertical DC and AC amplifier, 10 mv rms. Built-in calibrating voltages, 100, 10, 1, .01 volts, peak-to-peak. Line frequency, sawtooth, direct connection, shock mounted and illuminated, calibrated screen with flat-face tube. Portable. **Size:** 14" x 12" x 18" d. Shipping Wt., 61 lbs.

Model 770 Oscilloscope—Net Each.................... $435.00

MODEL 675A 5-INCH OSCILLOSCOPE

Late design TV service 'scope shows 1 cps to 4.5 mc, flat through color burst frequency; 20 mv rms sensitivity. Time base generator with 4 calibrated decades with 10-1 vernier. Frequencies: 10-100 cps, 100-1000 cps, 1-10 kc, 10-100 kc. Portable. **Size:** 13" x 10" x 16" d. Shipping Wt., 43 lbs.

Model 675A Oscilloscope—Complete with light loading probe. Net Each.................... $299.90

MODEL 209A TRUE VTVM AND CAPACITANCE TESTER

High quality, most popular of its type; has 9" meter, P-P voltmeter and AC volts rms. Zero-center DC scale. Low input capacity prevents overloading; built-in power supply. **AC-DC Volts:** 0-3, 12, 30, 120, 300, 1200. **DC Current:** 0-1200 ma. **Capacitance:** 0-1000 μf, 1-10,000 μμf. **Inductance:** 50 mh to 100 henries. **Ohms:** 0.1 ohm to 10,000 megs. **Frequency:** Up to 200 mc, AC. Portable. **Size:** 13¼" x 16¼" x 7" d. Shipping Wt., 26 lbs.

Model 209A VTVM, Capacitance Tester—Complete with leads. Net Each.................... $149.00

MODEL 455A VOLT-OHM-MILLIAMMETER

Overload cut-out system prevents accidental burn-out; any high voltage or current can be applied directly across any function without damage. AC-DC, 20,000 ohms per volt. **Volts:** 0-3, 15, 60, 150, 600, 1200 AC-DC. **Resistance:** 0-100 megs. **Center Scale Ranges:** 5, 500, 5000, 500,000 ohms. **Current:** 50 μa, 1-10-100-1000 ma, 10 amps. **Size:** 8½" l., 5⅞" w., 3" high, tapered to 1¾". Shipping Wt., 6 lbs.

Model 455A VOM—Complete with leads, less batteries. Net Each.................... $69.50

Model 457 VOM—Same as 455A but without overload protection, and 1000 ohms per volt AC. Net Each.................... $43.95

Carrying Case for 455A or 457—Net Each.................... 9.00

MODEL 225K VTVM KIT

Hickok-built 9" meter. Readability 0.2 ohm to 1000 megs. **Center scale,** 10 ohms. **DC Volts** (plus and minus), **AC Volts** and **AC rms:** 0-1200 in 7 ranges. **Peak-to-peak:** 0-3200 volts. Portable. **Size:** 13¼" x 16¼" x 7½" d. Shipping Wt., 23 lbs.

Model 225K VTVM Kit—Complete with dual-probe and leads. Net Each.................... $59.50

MODEL 656XC TV COLOR BAR GENERATOR

Fully saturated 100% NTSC color bar standard for complete color TV alignment. Highest quality obtainable. Portable. **Size:** 16¾" x 18⅜" x 7½" d. Shipping Wt., 48 lbs.

Model 656XC Color Bar Generator—Complete with leads. Net Each.................... $495.00

MODEL 660 WHITE DOT-BAR COLOR DISPLAY

White line crosshatch, white dot (small size), color display sequence of orange, red, magenta, blue, cyan, green. All frequencies crystal controlled and locked together with extreme stability. Portable. **Size:** 10½" x 10½" x 5¼" d. Shipping Wt., 21 lbs.

Model 660 White Dot-Bar Color Display—Complete with 2 crystals and cables. Net. $243.00

MODEL 615 SWEEP-MARKER ALIGNMENT GENERATOR

Single unit for complete visual TV alignment including tuner, video and IF. Portable. **Size:** 13¼" x 16¼" x 8" d. Shipping Wt., 39 lbs.

Model 615 Alignment Generator—Complete with leads and crystal. Net Each...... $339.90

Type 75 Termination Pad—Eliminates standing waves. Net Each.................... $11.50

MODEL 760 VIDEO SCANNER

Complete, cable-connected TV transmitting station for easy TV servicing; extra stable, extremely versatile. Provides many signals and displays normally not available to TV servicemen. Scans and produces video or RF signal for any slide inserted in the unit. Four slides and output cable supplied; 17 tubes. Portable. **Size:** 17" w., 18¾" h., 8½" d. Shipping Wt., 51 lbs.

Model 760 Video Scanner—Net Each.................... $372.00

MODEL 810 TRANSISTOR RADIO TESTER

Provides complete transistor radio troubleshooting. Includes tuned (IF and RF) receiver, audio amplifier, AM signal generator (IF and RF), cathode follower input probe, transistor tester, loudspeaker for signal tracing. 11¼" w. x 7" x 9" h. Shipping Wt., 16 lbs.

Model 810 Transistor-Radio Tester—Net Each.................... $119.00

MODEL 470 ELECTRONIC VOLT-OHMMETER

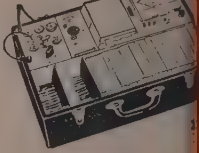
New, handy size professional's portable that features ease of use and a large Hickok-built 7" meter. DC voltages are zero-centered. Has a new high-sensitivity range for transistor bias testing. 105-125 v. AC. Shipping Wt., 10 lbs.

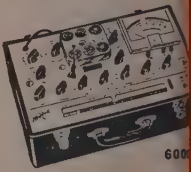
Model 470 Electronic Volt-Ohmmeter—Net Each.................... $89.75

MODEL 288X AM-FM GENERATOR

Crystal controlled, high output. RF variable 110 kc to 110 mc. AM and 100 kc to 160 mc FM in 7 fundamental bands. Crystal controlled 100, 1000 kc outputs. AF variable 0-15,000 cps; fixed, 400 cps. Over 100" of scale. Attenuation −10 to +38 db. Portable. **Size:** 13¼" h., 16¼" l., 7" d. Shipping Wt., 33 lbs. Includes leads and 100-1000 kc crystal.

Model 288X AM-FM Generator—Complete with leads. Net.... $298.00





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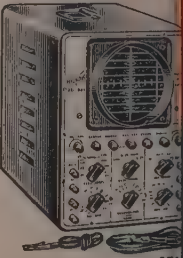

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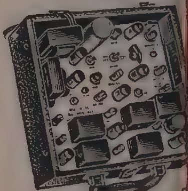

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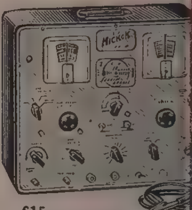

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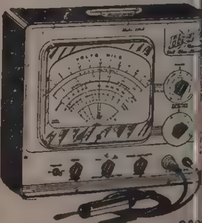

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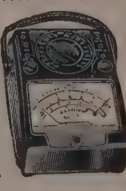

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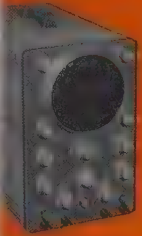
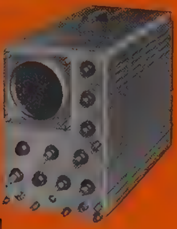
HEATHKIT®

THKIT OM-3



HEATHKIT O-12



THKIT OP-1

HEATHKIT OR-1

ATH COMPANY
ON HARBOR, MICHIGAN
A Subsidiary of Daystrom, Inc.

TEST EQUIPMENT

- For industry—for servicing
- Low cost
- Top quality components
- Superior circuitry
- Versatile performance

"GENERAL PURPOSE" 5" OSCILLOSCOPE KIT

A favorite among service technicians everywhere, the OM-3 incorporates a host of "extras" seldom found in this low price range. A modern etched circuit board simplifies construction, and assures high circuit stability. Shpg. Wt. 22 lbs.

Heathkit OM-3 .... **$49.95**

"EXTRA DUTY" 5" OSCILLOSCOPE KIT

The Heath patented sweep circuit in the O-12 functions from 10 cps to over 500 kc in five steps, giving you five times the usual sweep frequency range of other scopes. Shpg. Wt. 22 lbs.

Heathkit O-12 .... **$79.95**

"PROFESSIONAL" 5" DC OSCILLOSCOPE KIT

Featuring a calibrated driven sweep with built-in triggering circuits, DC coupled vertical amplifier and a 5ADP2 flat-face CRT, the OP-1 offers professional performance at big savings.

SPECIFICATIONS—Vertical channel—Frequency response: within 1 db, D.C. to 2.2 megacycles; within 3 db, D.C. to 3.6 megacycles; within 6 db, D.C. to 4.5 megacycles. **Rise time:** less than .1 usec. **Input impedance:** 3.6 megohm shunted by 28 mmf. **Sensitivity:** D.C. coupled; .1 V peak-to-peak for 1 cm deflection; A.C. coupled; .01 V peak-to-peak for 1 cm deflection. (Using built-in preamp.). Coupling: AC or DC, switch selected. **Horizontal channel—Frequency response:** within 1 db from D.C. to 450 kc; within 3 db from D.C. to 600 kc. **Input impedance:** 1 megohm shunted by 37 mmf. **Sensitivity:** 0.2 V peak-to-peak for 1 cm deflection. **Dimensions:** 3¾" W. x 14⅛" H. x 19" D. **Power requirements:** 105-125 V AC, 50 /60 cycles, 250 watts. Shpg. Wt. 34 lbs.

Heathkit OP-1 .... **$219.95**

"GENERAL RESEARCH" 5" DC OSCILLOSCOPE KIT

An excellent read-out indicator in computer applications, as well as a versatile general service scope. Features identical DC coupled vertical amplifiers, 5ADP2 flat-face CRT, and transformer operated silicon diode power supply.

SPECIFICATIONS—Vertical and Horizontal channels (identical)—Bandwidth: DC to 200 kc (1 db point). **Sensitivity:** 0.1 V (peak-to-peak) per CM (uncalibrated). **Attenuator:** 3-position, compensated type. **Gain control:** continuously variable. **Input impedance:** 3.6 megohms shunted by 28 mmf. **Coupling:** either AC or DC, switch-selected. **Relative phase shift between channels:** less than 5°. **Sweep generator—recurrent type:** linear saw-tooth produced by multi-vibrator type generator. **Sync provision:** either internal or external, switch-selected. **Frequency coverage:** 5 cps to 50 kc in four overlapping ranges. "External capacity" binding post for lower sweep rates. **Power requirements:** 105-125 V 50 /60 cycle AC at 100 watts maximum. **Overall dimensions:** 11" H. x 6¾" W. x 20" D. Shpg. Wt. 21 lbs.

Heathkit OR-1 .... **$144.95**

HEATHKIT

HEATHKIT V-7A

HEATHKIT AV-3

HEATHKIT MM-1

HEATHKIT M-1

HEATHKIT QM-1

HEATHKIT HD-1

HEATHKIT IB-2A

HIGH PERFORMA

ETCHED CIRCUIT VTVM KIT

World's largest selling VTVM. Features seven AC (RMS) and DC voltage ranges of 0-1.5, 5, 15, 50, 150, 500 and 1500. AC Ranges 0-4, 14, 40, 140, 400, 1400 and 4000. Seven ohmmeter ranges provide multiplying factors of X 1, X 10, X 100, X 1000, X 10k X 100k and X 1 megohm. A zero-center scale db range is provided The 11-megohm input impedance reduces "loading" of the circuit under test, assuring top accuracy. Precision 1% resistors are used and a circuit board simplifies assembly. Battery and test leads included. Shpg. Wt. 7 lbs.

Heathkit V-7A **$31.95**

AUDIO VTVM KIT

Handles AC measurements from 1 millivolt to a maximum of 30 volts RMS. Features a 4½" 200 microampere meter, with increased damping in the meter circuit for stability in low frequency tests 1% precision multiplier resistors are used. An ideal meter for measuring critical AC voltages encountered in audio and high fidelity equipment. Shpg. Wt. 6 lbs.

Heathkit AV-3 .... **$36.50**

20,000 OHMS/VOLT VOM KIT

Sensitivity is 20,000 ohms-per-volt DC and 5,000 ohms-per-vol AC. Function and range switches provide full scale settings o 0-1.5, 5, 50, 150, 500, 1500 and 5000 volts for both AC and DC Current ranges are 0-150 ua, 15 ma, 150 ma, 500 ma and 15 a Resistance measurement from as low as .2 ohms to as high as 2 megohms in three ranges. Db coverage is −10 db to +65 db 1% precision voltage divider resistors are used for high accuracy Shpg. Wt. 6 lbs.

Heathkit MM-1 .... **$36.50**

HANDITESTER KIT

Measures AC or DC voltages from 0-10, 30, 300, 1000 and 500 volts at 1000 ohms/volt. Direct current ranges are 0-10 ma an 0-100 ma. Ohmmeter ranges are 0-3000 and 0-300,000 ohms (3 and 3000 ohms center scale). Test leads and battery included Shpg. Wt. 3 lbs.

Heathkit M-1 .... **$21.95**

"Q" METER KIT

Measures inductance from 1 microhenry to 10 millihenrys, "Q on a scale calibrated up to 250 full scale, with multipliers of 1 or and capacitance from 40 mmf to 450 mmf, ±3 mmf vernier. Tes coil for calibration and easy-to-follow instructions furnished Shpg. Wt. 14 lbs.

Heathkit QM-1 .... **$53.95**

HARMONIC DISTORTION METER KIT

Measures harmonic distortion in amplifiers at frequencies betwee 20 and 20,000 CPS. Distortion ranges are 0-1, 3, 10, 30 and 100% full scale. Full scale voltage ranges are 0-1, 3, 10 and 30 volts. Fea tures high input impedance and 1% precision resistors. Ideal fo use with Heathkit model AG-9A Audio Generator. Shpg. Wt. 13 lbs

Heathkit HD-1 .... **$59.95**

IMPEDANCE BRIDGE KIT

Wheatstone bridge, capacity comparison bridge, Maxwell bridg and a Hay bridge in one compact package. Measures resistanc from 0.1 ohm to 10 megohms, capacitance from 100 mmf to 1 mfd, inductance from 0.1 mh to 100 h, dissipation factor (D) fro 0.002 to 1 and storage factor (Q) from 0.1 to 1000. Built-in powe supply, 1000 cycle generator and vacuum tube detector. Shpg Wt. 12 lbs.

Heathkit IB-2A **$72.95**

East

ST EQUIPMENT

)R BAR AND DOT GENERATOR KIT

ces six different test patterns: white dots, crosshatch, hori-
and vertical bars, ten vertical color bars, and a new shading
attern for screen and background adjustments. Kit includes
crystals, test leads, plus informative construction manual.
Wt. 13 lbs.

kit CD-1 .... $72.95

HEATHKIT CD-1

IGNAL GENERATOR KIT

FICATIONS—Frequency range: BAND A—160 kc to 500 kc. BAND B—
o 1650 kc. BAND C—1.65 mc to 6.5 mc. BAND D—6.5 mc to 25 mc. BAND E—
to 110 mc. **Calibrated harmonics:** 110 mc to 220 mc. **Radio frequency**
: In excess of 100,000 microvolts. **Modulation frequency:** Approximately
les. **Audio output:** 2 to 3 volts. **Audio frequency input:** Approximately 5 V
1 megohm. **Power requirements:** 105-125 V, 50/60 cycles. **Cabinet size:**
x 6½" H. x 5" D.
Wt. 8 lbs.

kit SG-8 .... $23.95

HEATHKIT SG-8

)RATORY RF GENERATOR KIT

ires selectivity, sensitivity and stage gain. Covers 100 kc to
in five bands. Output impedance 50 ohms. RF output in
of 100,000 microvolts controlled by both step and continu-
variable attenuators. AM modulation is 400 cycles variable
% depth. Meter indicates RF output or modulator percent-
est leads included. Shpg. Wt. 16 lbs.

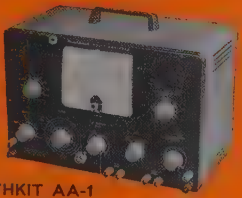
kit LG-1 .... $59.95

HEATHKIT LG-1

IO ANALYZER KIT

ically a complete test lab in itself, the AA-1 combines an AC
M, audio wattmeter and a complete intermodulation distor-
analyzer in one compact instrument. Switch selection of
al or external load. Intermodulation generator frequencies
0 cycles and 6 kc. Ideal for checking all audio amplifiers.
Wt. 13 lbs.

kit AA-1 .... $59.95



HEATHKIT AA-1

T OSCILLATOR KIT

des instant selection of 262 kc, 455 kc, 465 kc, 600 kc and
kc for RF and IF alignment. Two switch-selected crystal
s are also provided. RF output may be either unmodulated
dulated, or the audio may be used separately. Output level is
tted by a continuously variable control. Shpg. Wt. 4 lbs.

kit TO-1 .... $20.50

HEATHKIT TO-1

IABLE VOLTAGE REGULATED
VER SUPPLY KIT

ers variable regulated B +, variable bias voltage, and fila-
voltage. Regulated B + output is continuously variable from
00 volts DC; 125 ma available at any voltage in this range.
oltage is variable from 0 to −100 volts DC at 1 ma unregu-
Filament voltage of 6.3 volts AC at 4 amperes is also
ble. Shpg. Wt. 16 lbs.

kit PS-4 .... $66.95

HEATHKIT PS-4

TUBE CHECKER KIT

Checks all tubes encountered in everyday radio and TV service work.

SPECIFICATIONS—available tests: Emission, short, leakage, open element, filament continuity. **Socket accommodations:** 4-pin, 5-pin, 6-pin, 7-pin large & pilot light, 7-pin miniature, 7-pin sub-miniature, octal, loctal, 9-pin miniature, blank. **Meter:** 1 ma, Bad-?-Good scale illuminated. **Line voltage adjustment:** Step type. **Roll chart mechanism:** Constant tension, free rolling, thumbwheel operation, illuminated. **Filament voltage:** 0.63, 1.4, 2, 2.35, 2.5, 3.15, 4.2, 4.7, 5, 6.3, 7.5, 9.45, 12.6, 19.6, 25, 32, 50, 70, 110 volts AC. **Element test voltages:** 30, 100, 250 volts AC. **Dimensions:** 5½" x 8½" x 13". **Power requirement:** 105-125 volts 50/60 cycle AC. Shpg. Wt. 12 lbs.

Heathkit TC-3 .... **$48.95**

DIRECT READING CAPACITY METER KIT

Values are read directly on a 4½" 200 ua panel meter calibrated in mmf and mfd. Calibration is linear with four ranges provided: 0-100 mmf, 0-1000 mmf, 0-.01 mfd and 0-.1 mfd. Calibrating capacitor standards are supplied in the following values: 100 mmf ±1%; 1000 mmf ±1%; 0-.01 mfd ±2%; 0.1 mfd ±2%. Shpg. Wt. 7 lbs.

Heathkit CM-1 .... **$35.95**

VISUAL-AURAL SIGNAL TRACER KIT

Locate radio faults quickly by tracing RF, IF and audio signals in AM and FM receiver circuits. Safely checks new transistor-type radios which can be damaged through ordinary testing procedures. Shpg. Wt. 5 lbs.

Heathkit T-4 .... **$24.95**

CONDENSER CHECKER KIT

Capacity measurements are made in four ranges covering values from 0.00001 mfd to 1000 mfd. Also checks for shorts, opens, leakage and intermittents. Measures resistance from 100 ohms to 5 megohms in two ranges. An electron beam "eye" tube indicates bridge balance and leakage. Five polarizing voltages, 25 to 450 volts DC, provided for leakage tests. Test switch automatically discharges condenser after test. Shpg. Wt. 7 lbs.

Heathkit C-3 .... **$23.95**

IN-CIRCUIT CAPACI-TESTER KIT

Detects open capacitors from 50 mmf up, if not shunted by an excessively low resistance value. Detects shorted capacitors up to 20 mfd shunted by not less than 10 ohms. Checks all by-pass, blocking, and coupling condensers of the paper, mica and ceramic types. Not intended to indicate capacitance value or detect leakage in capacitors of any type, nor to check electrolytic condenser characteristics. Test leads supplied. Shpg. Wt. 5 lbs.

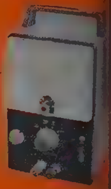
Heathkit CT-1 .... **$9.95**

"LOW RIPPLE" BATTERY ELIMINATOR KIT

Ideal for servicing transistor and automobile radio circuits, including the "hybrid" units using both tubes and transistors. An extra low-ripple filter circuit holds AC ripple down to less than .3%. Powers all of the newest transistor circuits requiring 0 to 12 volts DC. Doubles as convenient battery charger. Shpg. Wt. 21 lbs.

Heathkit BE-5 .... **$49.50**

HEATHKIT TC-3



HEATHKIT CM-1

HEATHKIT T-4

HEATHKIT C-3

HEATHKIT CT-1

HEATHKIT BE-5

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harvey

radio company, inc.

103 west 43rd street · new york city

HEATHKIT

HEATH COMPAN
BENTON HARBOR, MICHI
A Subsidiary of Daystrom, I

ervicemen's Test Instruments

PRECISION APPARATUS TEST EQUIPMENT

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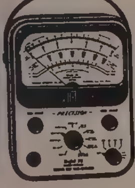
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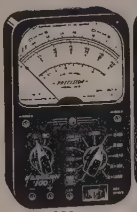
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MODEL 120 LAB-TYPE V-O-M

s 44 ranges: From 1.2 volts full scale AC-DC to 6000 volts
e (up to 60 kv DC with optional TV-2 Probe); from 60
ull scale (1 μamp per scale div.) to 12 amps DC; from
to +3 db low scale to +56 db to +77 db high scale; from
ms full scale to 0-20 megs. full scale. **AC Voltage Ranges:**
ns per v.; 0-1.2-3-12-60-300-600-1200-6000 v. **DC Voltage**
: 20 K ohms per volt; same ranges as AC volts. **AC Output**
: Same as volts, with built-in blocking capacitor to 600
C Current Ranges: 0-60-300 μamps., 0-1.2-12-120-600
ps., 0-12 amps. **Resistance Ranges:** Self-contained batter-
0-2000-200,000 ohms, 0-2-20 megs. **Decibel Ranges:** −20
db; 0 db equals 1 milliwatt, 600 ohms. **5¼″ Pace Meter:**
ps sensitivity, ±2% accuracy. Manganin compensated.
-wound and deposited film multipliers and shunts. Two
stance jacks. Separately identified and isolated jacks for
igh ranges. **Transit Safety:** Range selector setting for
g meter movement while in transit. Molded phenolic case
el. Case 5⅜″ x 7″ x 3⅛″.
n Model 120—Complete with internal ohmmeter, bat-
anana plug test leads and operating manual. $\$44^{95}$
g Weight, 5 lbs. Net Each....................

DEL 68 AC OPERATED VTVM-OHMMETER

range, **AC Operated,** general purpose electronic multi-
ester. Factory engineered, wired and calibrated. **DC**
: ±5—0-3-12-60-300-1200 volts. **Resistance:** 0-1000-
ohms; 0-1-100-1,000 megohms. **High Impedance RMS AC**
Ranges: 0-3-12-60-300-1200 volts. **Peak-to-Peak Voltage**
: 0-8-32-160-800-3200 volts. Five stabilized zero-center
e ranges for FM discriminator balancing, voltage polarity
nations, etc. High frequency probe Model RF-12 can be
th this meter. Meter is furnished with one coaxial 3-way
probe for all functions except High Frequency. 1% multi-
d shunts. 5¼″ meter: 400 micro amps sensitivity; ±2%
y. Steel cabinet with aluminum panel; blue-gray ripple
Size: 5⅞″ x 7¾″ x 3½″. Complete with tubes, internal
er battery and instruction manual. Shipping Weight,
n Model 68—Net Each.......................... $\$54^{50}$

MODEL 78 BATTERY VTVM-OHMMETER

range **Battery Operated** electronic test set, ideal for
lephone, electronic control, TV, geophysical electronics,
Voltage Ranges (± from Zero-center): 1.5-6-30-150-600-
olts; 13⅓ megohms constant input resistance. **Ohm**
: 0-1,000-100,000 ohms; 0-1-100-1,000 megohms. **RMS**
nges: (Extra-high Impedance): 0-3-12-60-300-1200 volts:
input resistance; 67 μμf input capacity. Supplied with
3-way VTVM probe for all functions except High Fre-
Model RF-12 High Frequency probe can be used. Self-
ed; built-in battery compartment holds 1-477 (67½ volts),
1½ volts), and 2-950 (1½ volts). 1% multipliers and
5¼″ meter: 100 microamps sensitivity, ±2% accuracy.
ay ripple finished steel cabinet; aluminum panel. **Size:**
7¾″ x 3½″. Complete with tubes, one set of batteries and
ed instruction manual. Shipping Weight, 7 lbs. $\$62^{50}$
on Model 78—Net Each........................
on Model RF-12 High Frequency Crystal Probe $\$10^{95}$
uency range to 250 mc. Net Each............
n Model TV-4 Probe—Super-high voltage safety $\$14^{75}$
with X100 cartridge for ranges to 60 kv. Net...

MODEL 88 VTVM-OHMMETER

s 7 functions with 40 ranges. (1). True all-zero-center DC
; from ±1.2 volts through ±1200 volts in 6 overlapping
(2). (+) Positive reading, left-hand-zero DC VTVM on
¼″ meter; from +1.2 volts full scale through +1200 volts
eps. (3). (−) Neg. reading, left-hand-zero DC VTVM on
e; from −1.2 volts full scale through −1200 volts in 6
4). Full scale ohmmeter; 0-1000 megs. 5 decimally related
10 ohms center scale Rx1 range. (5). High imped., low
y AC-RMS VTVM; from 1.2 volts full scale through 3200
6 ranges; separate 1.2 volt meter scale. (6). Peak-to-Peak
AC VTVM; from 3.2 volt full scale through 3200 volts in
y selected steps; separate 3.2 volts range calibrated meter
7). High freq. vacuum tube probe type VTVM extends
S reading to 300 mc with minimized circuit loading; from
ull scale through 300 v. in 5 steps. RF-10A probe optional.
on Model 88—Complete with AC line cord, internal bat-
axial VTVM Probe and Operating Manual. Overall case
ions 5⅝″ x 7″ x 3⅛″. Shipping Weight, 6 lbs. $\$74^{50}$
ch......................................
on Model RF-10A—High Frequency Vacuum $\$14^{40}$
robe. Net Each..............................
on Model TV-8—60 kv Probe. Net Each.......**$14.75**
n Model ST-1—Snap-on, foldaway type Stand. Tilts.
ch..**$1.00**

POCKET SIZE V-O-M'S

Model 100—1000 ohms/volt AC and DC. AC and DC Voltage Ranges: 0-6-30-150-600-1500-6000. DC Current Ranges: 0-0.6-6-60 300 ma, 0-1.5 amps. Ohms: 0-2000-200,000 ohms, 0-2 megs (all self-contained). DB: −6 to +77 db; 0 db equals 1 mw, 600 ohms. 400 microamps sensitivity; ±2% accuracy.

Model 110—20,000 ohms/VDC; 5000 ohms/VAC. AC and DC Voltage Ranges: 0-1.5-6-30-150-600-3000. DC Current Ranges: 0-60-600 microamps; 0-6-60-600 ma. Ohms: 0-2000-200,000 ohms; 0-20 megs. (all self-contained). DB: −20 to +71 db; 0 db equals 1 mw, 600 ohms. 50 microamps sensitivity; ±2% accuracy.

Both models have 3½″ wide-vision meters, 1% multipliers and shunts (wire-wound and deposited film types). Two plug jacks serve all standard ranges. Separately identified and isolated jacks provide for extra-high ranges. 1¹¹⁄₁₆″ x 3½″ x 5⅜″. Shipping Weight, 3 lbs.

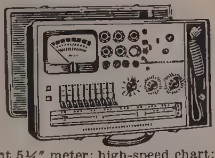
Model 100—Net Each.............................. $\$29^{95}$
Model 110—Net Each..............................**$34.50**

MODEL 98 VTVM-OHMMETER

Nine distinctly separate functions with 55 wide-spread ranges. **6 True 0-Center DC Voltage Ranges:** (26⅔ megs input); 0, ±1.2, ±6, ±12, ±60, ±300, ±1200. **6 Minus and 6 Plus (Left Hand 0) DC Voltage Ranges:** (13⅓ megs input); 0-1.2-6-12-60-300-1200. **6 High Z RMS AC Voltage Ranges:** 0-1.2-6-12-60-300-1200. **5 Special High Frequency Probe Ranges:** 0-1.2-6-12-60-300 VRMS. **6 High Z P-P AC Voltage Ranges:** 0-3.2-16-32-160-800-3200. **6 Electronic Ohmmeter Ranges:** 0-1000-100,000 ohms; 0-1-10-100-1000 megs. **8 DC Current Ranges:** 0-300 microamps; 0-1.2-6-30-120-600 ma; 0-1.2-12 amps. **6 DB Output Ranges:** −20 to +63 db. One universal coaxial AC-DC VTVM probe for all functions except high frequency. 7″ meter: 200 microamps, ±2% accuracy. 1% multipliers and shunts (wire and deposited film types). With 3-way VTVM probe and manual.

Model 98-MCP Deluxe—(Illus.). Blue-gray, hooded steel cabinet; two-color aluminum panel with contrasting knobs. 10½″ x 13″ x 6⅝″. Shpg. Wt., 17 lbs. Net Each..... $\$119^{50}$
Model 98-MCP Standard—Black ripple-finished cabinet; black anodized panel. 10½″ x 12″ x 6″. Shpg. Wt., 17 lbs...**$114.50**
Model 98-P Deluxe—Rubbed natural finish hardwood case with hinged cover; two-color aluminum panel. 12″ x 13″ x 6″. Shipping Weight, 18 lbs. Net Each............ $\$122^{25}$
Model 98-P Standard—98-MCP Standard with hardwood case. 12″ x 13″ x 6″. Shpg. Wt., 18 lbs. Net...............**$117.25**
Model 98-PM Deluxe—Panel mounting. Shipping Weight, 20 lbs. Net Each....................................**$125.00**
Model 98-PM Standard—Panel mounting. Shpg. Weight, 20 lbs. Net Each....................................**$120.00**

MODEL 660 TUBE-TRANSISTOR TESTER

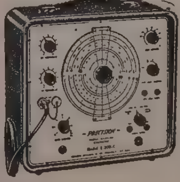


Provides accurate emission test for all modern AM-FM-TV tubes, including new series-string types, tuning eyes, gas rectifiers, multi-section types. Tests for merit, leakage, shorts. Tests gain, shorts, leakage on RF, audio, power and tetrode transistors (n-p-n and p-n-p). Checks forward and reverse current of crystal diodes. Provision for picture tube test. Filament voltages ¾-117 v. in 24 steps; giant 5¼″ meter; high-speed chart; built-in pin straighteners. 18″ x 10½″ x 6¼″.

Precision Model 660—Net Each.................. $\$109^{00}$
Precision Model PTA Picture Tube Adapter—Net Each.**$7.75**

MODEL E-200-C SIGNAL MARKING GENERATOR

Precision Model E-200-C Signal Generator is a modern multi-band generator for AM, FM and TV. Covers 88 kc to 240 mc in 9 bands on direct reading dial. Accurate to 1% and high stability on all bands. 400 cycle sine wave audio oscillator; dual RF attenuators; shielded coaxial output cable; direct reading variable modulation from 0 to 100%. AVC-AGC substitution system. Tubes: 6AU6; 6U8; 5Y3.

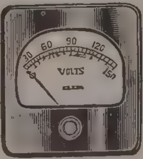


Model E-200-C—Black ripple finish steel case, 10½″ x 12″ x 6″. Shpg. Wt., 17 lbs. Net Ea. $\$90^{00}$

Model E-200-C Deluxe—Gray-blue hooded steel cabinet with 2-color aluminum panel. 11½″ x 13″ x 6⅝″. Net Each.... $\$95^{00}$

Precision Panel Instruments

MODEL 476 3½″ AC PANEL INSTRUMENTS



Model 476 AC movable iron type instruments reflect the long experience and Weston tradition of building instruments to highest standards of dependability and service. Model 476 is available in round flush bakelite cases, 3½″ or 3⅜″ and in 3¼″ metal cases with black finish, also in round surface metal and rectangular flush bakelite cases. Normally calibrated for use on non-magnetic panels. For magnetic panel use, instruments ordinarily will be adjusted for .09″ steel panel thickness. Accuracy within 2%.

MODEL 476 AC AMMETERS

Power consumption, 5 amp range at 5 amps, 0.25 watt; at 60 cycles, 0.26 volt-ampere. For use on frequencies 25 to 500 cycles.

Range	Approx. Res.	Scale Div.	List Price
1	.22	50	$21.00
1.5	.092	30	21.00
2	.052	40	21.00
3	.024	30	21.00
5	.010	50	21.00
8	.0042	40	21.00
10	.0037	50	21.00
15	.0027	30	21.00
20	.0012	40	21.00
30	.00085	30	21.00
50	.00072	50	21.00

MODEL 476 AC VOLTMETERS

Power consumption, 150 volt range at 115 volts, 0.84 watt; at 60 cycles, 0.84 volt-ampere. Normally adjusted for use on frequencies 25 to 125 cycles.

Range	Approx. Ohms Per Volt	Scale Div.	List Price
1.5	3	30	$21.00
3	6	30	21.00
5	10	50	21.00
8	10	40	21.00
10	14	50	21.00
15	14	30	21.00
30	26	30	21.00
50	52	50	21.00
100	110	50	21.75
130	110	26	22.50
150	110	30	22.50
250	167	25	24.00
300	167	30	24.75
500	167	50	27.75

MODEL 476 AC MILLIAMMETERS

For use on frequencies from 25 to 500 cycles.

Range	Approx. Res.	Scale Div.	List Price
15	2300	30	$21.00
25	650	25	21.00
50	171	50	21.00
100	34	50	21.00
250	4.61	25	21.00
500	1.14	50	21.00

MODEL 301 3½ INCH DC PANEL INSTRUMENTS

Model 301 permanent magnet moving coil type DC instruments are typical dependable Weston products. They are available in 3½″ or 3⅜″ round flush bakelite cases, 3¼″ round flush black metal cases as well as in round surface metal and rectangular flush bakelite cases, matching the Model 476. Accuracy is within 2%.

MODEL 301 DC VOLTMETERS

Range	Scale Div.	Ohms Per Volt	List Price
1.5	75	1000	$21.75
3	60	1000	21.75
5	50	1000	21.75
8	40	1000	21.75
10	50	1000	21.75
15	75	1000	21.75
30	60	1000	21.75
50	50	1000	21.75
80	40	1000	21.75
100	50	1000	22.50
150	75	1000	23.25
200	40	1000	24.00
300	60	1000	25.50
500	50	1000	30.00
800	40	1000	34.50
1 kv	50	1000	37.50

MODEL 301 DC MILLIAMMETERS

Ranges listed from 40 milliamperes up are shunted and have a drop of about 100 mv.

Range	Scale Div.	Approx. Res., Ohms	List Price
1	50	105	$21.00
1.5	75	27	21.00
2	40	27	21.00
3	60	18	21.00
5	50	5.7	21.00
10	50	2.0	21.00
15	75	2.0	21.00
20	40	2.0	21.00
30	60	1.2	21.00
50	50	2.0	21.00
100	50	1.0	21.00
150	75	0.66	21.00
200	40	0.5	21.00
300	60	0.33	21.00
500	50	0.2	21.00
800	40	0.12	21.00
1000	50	0.05	21.00
1-0-1	40	27	21.00
50-0-50	40	2	21.00
100-0-100	40	1	21.00

MODEL 301 DC MICROAMMETERS

Range	Scale Div.	Approx. Res., Ohms	List Price
20*	40	1400	$35.25
30*	60	1400	35.50
50	50	1140	33.50
100	50	600	32.25
200†	40	660	24.75
200††	40	360	24.75
200*	40	55	31.25
500††	50	195	24.75
50-0-50	50	600	32.25
100-0-100	40	660	24.75
500-0-500	50	105	21.00

*Recommended for use in horizontal or 45° position.

†Standard instruments are regularly supplied unless low resistance instruments are specifically ordered.

††Recommended for use with Weston Photronic Cell. (Reg. Trade mark)

MODEL 301 DC AMMETERS

Model 301 DC ammeters are regularly su plied with self-contained shunts up to a including 50 ampere at a drop of 50 n ±5%. Ranges higher than those listed a available by use of external shunts. List Price............ $21

SINGLE RANGES ZERO CENTER

Range	Scale Div.	Range	Scale Div.
1	50	5-0-5	50
1.5	75	10-0-10	40
2	40	15-0-15	60
3	60	20-0-20	40
5	50	30-0-30	60
10	50	50-0-50	50
15	75		
30	60		
50	50		

MODEL 301 AC RECTIFIER TYPE INSTRUMENTS

Available in a number of ranges as the practical means of measuring minute AC currents. They may be relied upon to within about 5% of full scale value on wave forms closely approximating the sine wave at ordinary room temperatures.

Full descriptive literature is availab

MODEL 301 AC VOLTMETERS

Range	Scale Div.	1000 Ohms Per Volt	2000 Ohms Per Vol
1	50	....	$34.5
1.5	75	....	34.5
3	60	$31.50	34.5
5	50	31.50	34.5
10	50	31.50	34.5
15	75	31.50	34.5
25	50	31.50	34.5
50	50	31.50	34.5
100	50	32.25	35.2
150	75	33.00	36.0
300	60	35.25	......

MODEL 301 OHMMETERS

To compensate for battery voltage change rheostats of value shown should be use rheostat and battery not supplied.

Range	Center Scale	Batty. Volts	Rheo. Ohms	List Price
0-1000	40	1.5	100	$25.7
0-10K	350	4.5	250	25.7
0-100K	3500	4.5	2000	26.5
0-500K	12500	15.0	2000	27.2
0-2 Meg.	70K	90.0	2000	27.2

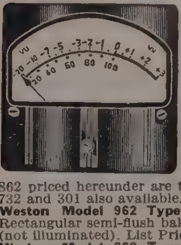
MODEL 301 AC MILLIAMMETERS

Range	Scale Div.	Resis., Ohms	List Price
0.5	50	1030	$34.5
1	50	470	30.7
2	40	270	30.7
5	50	150	30.7

MODEL 301 AC MICROAMMETERS

100	50	3400	$41.0
200	40	2400	34.5
250	50	2060	34.5
500	50	1030	34.5

WESTON VU METERS



The VU meters, used today as the standard level indicator in the broadcast and recording field, were developed by Weston in collaboration with engineers of representative broadcasting organizations and communication groups. Weston VU meters carry both the type 30A and 30B scales. The 30B scale stresses per cent use of the transmitter output, and is the standard for broadcast service. The 30A scale stresses the level in VU, and is largely used in monitoring wire lines. Weston VU meters can be made in all DC meter models but the models 962 and 862 priced hereunder are the most popular, with the models 742, 732 and 301 also available.

Weston Model 962 Type 30 VU Meter with Scale A or B. Rectangular semi-flush bakelite case, size 4.25″ x 3.94″ (not illuminated). List Price........................ $55.50

Weston Model 862 Type 30 VU Meter with Scale A or B. Rectangular semi-flush bakelite case, size 4.25″ x 3.94″ (illuminated). List Price........................ $64.00

Weston Model 862 Type 30 VU Meter with Scale AX or B (X signifying vinylite scale illuminated from the rear by tw lamps; mechanism is self-shielded core magnet type.) List Price........................ $74

MODEL 301 VU METERS

Any Model—List Price........................ $41.5

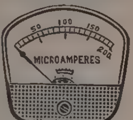
Scale	3.5″ Rd.* No. 301-	3.25″ Rd.† No. 301-	2.94″ Rd.‡ No. 301-	2.75″ Rd.§ No. 301-	3.13″ x 3″ Sq. No. 301
30A	3302001S	3102001	3402001	3202001	3602001S
30B	3302002S	3102002	3402002	3202002	3602002S

*Flush, bakelite. †Flush, metal. ‡Surf., bakelite. §Surf., metal.

WESTON PANEL AND TEST INSTRUMENTS ARE AVAILABLE IN A WIDE VARIETY OF DESIGNS TO MEET YOUR EXACT REQUIREMENTS. WRITE FOR INFORMATION ON NEW OR UNLISTED ITEMS.

Precision Panel Instruments

MODELS 1721/ 1722 PANEL INSTRUMENTS



odern styling ra-long scale °. Cormag® mechanism mounting on or non-mag-nels without adjustment. no danger of intereffects. els can be mounted interchange-h any 2.5" JAN or MIL spec in-t. Accuracy ±2% DC, ±3% AC type. Terminals, 8-32 BC rods s and washers. Screwdriver type ector, 360° rotation. Crown shape h molded bakelite base and clear over.

EL 1721 DC VOLTMETERS*

e	Scale Div.	List Price
	50	$12.75
	75	12.75
	50	12.75
	75	12.75
	60	13.25

ms per volt approx.

DEL 1721 DC AMMETERS

e	Scale Div.	List Price
	50	$12.25
	60	12.25
	50	12.25
	50	12.25

DEL 1721 DC AMMETERS MV EXTERNAL SHUNT TYPE

	Scale Div.	List Price*
ps.	50	$12.50
ps.	75	12.50
ps.	40	12.50

ot include shunt or leads. Leads only when specified on order. otherwise specified, 0.065 ohm is in adjustment of the 50 millivolt nt for shunt lead resistance. Where , 5' shunt leads, P/N-131442, will ded for use with instrument at a $1.00, per pair.

MODEL 1721 DC MILLIAMMETERS

Range	Approx. Res./Ohms	Scale Div.	List Price
1	80	50	$12.25
5	8	50	12.25
10	1.1	50	12.25
20	1.1	40	12.25
50	2	50	12.25
100	1	50	12.25
200	0.5	40	12.25
300	0.33	60	12.25
500	0.2	50	12.25
1/0/1	45	50	12.25

MODEL 1721 DC MICROAMMETERS

Range	Approx. Res./Ohms	Scale Div.	List Price
20	5500	40	$22.25
50	4700	50	18.25
100	1700	50	15.25
200	600	40	12.75
500	230	50	12.75
50/0/50	1700	50	15.25

MODEL 1722 RECTIFIER TYPE AC VOLTMETERS*

Range	Scale Div.	List Price
5	50	$18.75
15	75	18.75
50	50	18.75
150	75	18.75
300	60	18.75

*1,000 ohms per volt approx.

MODEL 1722 RECTIFIER TYPE AC MILLIAMMETERS

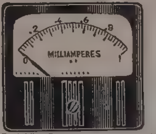
Range	Approx. Res./Ohms	Scale Div.	List Price
1	470	50	$18.75
5	150	50	18.75

MODEL 1722 RECTIFIER TYPE AC MICROAMMETERS

Range	Approx. Res./Ohms	Scale Div.	List Price
200	2400	40	$21.25
500	750	50	18.75

Model 1722 Type 30 (Scale A or B) Volume Level Indicator—List Price.....**$27.50**

MODEL 1331—3½ INCH LONG SCALE TYPE



Exceptional readability with long scale 3.25", 100°. Cormag® shielded mechanism permits interchangeability on magnetic or non-magnetic panels. Black, one-piece snap-on front, plastic case 3.80" x 3.44". Solder terminals are standard, except on self-contained ammeters above 10 maps., which have nuts and washers.

DC MILLIAMMETERS—MODEL 1331

Range	Approx. Res., Ohms	Scale Div.	List Price
1	88	50	$15.25
3	18	60	15.25
5	8	50	15.25
10	1.1	50	15.25
15	1.1	75	15.25
20	1.1	40	15.25
30	1.0	60	15.25
50	2.0	50	15.25
100	1	50	15.25
200	0.5	40	15.25
300	0.33	60	15.25
500	0.2	50	15.25
1/0/1	45	40	15.25
10/0/10	1.1	40	15.25
100/0/100	1	40	15.25

AC MICROAMMETERS—MODEL 1332

200	2400	40	$24.25
500	750	50	21.75

AC VOLTMETERS—MODEL 1332

Range	Scale Div.	List Price	
		1000 Ohm/V	2000 Ohm/V
1.5	75	....	$20.25
3	60	$21.75	22.25
5	50	21.75	....
10	50	21.75	22.25
15	75	21.75	22.25
50	50	21.75	....
100	50	21.75	....
150	75	21.75	22.25
300	60	22.25	....

DEL 1301—3½-INCH ANEL INSTRUMENTS

Compact, dependable design; available in either round or rectangular cases. Has Cormag® mechanism for mounting on magnetic or non-magnetic panels. Bakelite cases. Solder terminals on units up to 10 amps.; 10-50 amp. units have studs with d washers. Scale 2.36" long, 100°. y ±2% DC, ±3% AC rectifier

CROAMMETERS—MODEL 1301

e	Approx. Res.,Ohms	Scale Div.	List Price
	1700	50	$17.75
	600	40	15.25
	230	50	15.25
	1700	50	17.75
00	600	40	15.25
00	88	50	14.75

HIELDED MICROAMMETERS— MODEL 1306

	1170	40	$28.50
	1050	60	28.50
	1140	50	27.50

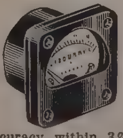
AMMETERS—MODEL 1301

Scale Div.	List Price	Range	Scale Div.	List Price
50	$14.75	10	50	$14.75
40	14.75	15	75	15.75
60	14.75	30	60	15.75
50	14.75	50	50	15.75

MV EXTERNAL SHUNT TYPE MODEL 1301

cale	Scale Div.	List Price
amps	50	$15.00
amps	75	15.00
amps	40	15.00
amps	60	15.00
amps	50	15.00

MODEL 1011—1½-INCH PANEL INSTRUMENTS



Accuracy and readability in a miniaturized unit. Flush mounting, pressure sealed units conform to MIL-M-3823 specs. Steel cases. Two styles: plain front without zero corrector but with 1% added tolerance; embossed front with zero corrector. Accuracy within 3% on DC and thermo instruments; Rectifier AC units within 4%. Units above 200 μa are magnetically shielded; below this level will be shielded if specified. Scales 1.3" long. Solder terminals.

DC VOLTMETERS—MODEL 1011

Permanent magnet moving coil; sensitivity 1000 ohms per volt. With zero corrector. Self-contained ranges.

Range	Scale Div.	List Price	Range	Scale Div.	List Price
1	20	$27.00	50	25	$27.00
5	25	27.00	60	30	27.00

DC MILLIVOLTMETERS—MODEL 1011

Embossed front with zero corrector. Permanent magnet moving coil.

Range	Scale Div.	Approx. Res., Ohms	List Price
10	20	10	$26.25
50	25	50	26.25
100	20	100	26.25
1000	20	1000	26.25

AC MICROAMMETERS—MODEL 1012

Embossed front with zero corrector. Permanent magnet moving coil.

100	20	3500	$48.75
500	25	1000	39.75
1000	20	450	36.00

WE CARRY AC VOLTMETERS, MILLIAMMETERS AND MICROAMMETERS; DC MICROAMMETERS, AMMETERS, MILLIAMMETERS AND VOLTMETERS IN THE ABOVE LISTED MODELS. WRITE FOR PRICES ON UNLISTED INSTRUMENTS.

48X-588

MODEL 507 THERMO METERS

Power Consumption: 1-4 amps., 0.2-0.4 watt/amp.; 5 amps. and higher, 0.2 watt/amp. Full scale accuracy, 2%; scale, 1.57". Case Style: Round flush wide bakelite, 2.69"; Round flush wide metal, 2.55"; Round flush narrow metal, 2.31"; Rectangular flush bakelite, 2.38".

MODEL 507 AMMETERS

Ranges shown are self-contained. List Price.............. $27⁰⁰

Range	Scale Div.	Range	Scale Div.
1	20	8	40
1.5	30	10	20
2	40	15	30
3	30	20	40
5	25		

MODEL 507 MILLIAMMETERS

Range	Scale Div.	Approx. Resis. Ohms	List Price
100	20	5.2	$30.00
115*	20	5.2	30.00
120	30	5.2	30.00
300	30	1.8	30.00
500	25	1.3	30.00

*Current squared galvanometer with uniformly divided scale.

MODELS 733 AND 743 THERMO AMMETERS

Power Consumption: 1-4 amps., 0.2-0.4 watt/amp.; 5 amps. and higher, 0.2 watt/amp. Full Scale Accuracy: 743, 1%; 733, 2%. Scale Size: 743, 3.52"; 733, 2.4". Case Styles: 743—Rectangular flush bakelite or rectangular surface bakelite, 4" x 4¼"; 733—Rectangular flush bakelite, 3" x 3.13".

Model 733—List Price.......... $44⁰⁰

Model 743—List Price..........$54.50

Amps	Scale Div.	Amps	Scale Div.	Amps	Scale Div.
1	50	4	40	8	40
1.5	75	5	50	10	50
2	40	6	60	15	75
2.5	50	7.5	75	20	40
3	60				

Simpson Accurate Panel Meters

INSTRUMENTS THAT STAY ACCURATE

D.C. MILLIAMPERES
Simpson
2
4
6
8
10

"WIDE-VUE" PANEL INSTRUMENTS

Modern styling with durable, open face plastic cover for wide-angle readability and protection of meter face; permits longer scales. Black, one-piece wrap-around cover is made of methyl methacrylate. Black bakelite case on 2½" and 3½" models; lucite case on 4½" units. DC meters have self-shielded core magnet movements except 0-25 and 0-50 microammeters and VU meters, which are external magnet type. AC meters have moving vane type movement. Accuracy is 2% except Models 1347 and 1349, 5%. All are calibrated for nonmagnetic panels; for steel panels, state panel thickness and add **$1.65** to prices shown.

Models 1227 and 1257—2½" meters require 2.17" dia. hole; four mounting studs on 1.88" centers. Scale length 2.36".
Models 1327, 1347 and 1357—3½" meters require 2.73" dia. hole; four mounting studs on 2.24" centers. Scale 3.14" long.
Models 1329, 1349 and 1359—4½" meters require 2.75" dia. hole; four mounting studs on 4" x 3.56" centers. Scale length, 3.93".

VOLTMETERS

Model	1227	1327	1329	1257	1357	1359
Range	DC			AC		
0-5	$11.55	$12.00	$13.20		$10.95	$12.60
0-8		12.00	13.20			
0-10	11.55	12.00	13.20	$10.20	10.95	12.60
0-15	11.55	12.00	13.20		10.95	12.60
0-25	11.55	12.00	13.20	10.80	11.25	12.60
0-30	11.55	12.00	13.20			
0-50	11.55	12.00	13.20	10.80	11.25	12.60
0-100	11.55	12.00	13.20		11.70	12.60
0-150	11.55	12.00	13.20	11.40	12.15	13.20
0-200		12.00	13.20			
0-250		12.00	13.20		12.15	13.20
0-300	11.55	12.00	13.20	11.40	12.15	13.20
0-300	11.55	12.00	13.20	11.40	12.15	13.20
0-500	12.00	12.60	13.65		16.95	18.15
0-750	12.00	12.60	13.65			
0-1000	14.25	14.85	16.05			

AMMETERS

DC units have internal shunts for ranges up to and including 50 amps. AC units are self-contained.

Model	1227	1327	1329	1257	1357	1359
Range	DC			AC		
0-1	$10.95	$11.40	$12.60	$10.20	$10.80	$12.75
0-1.5	10.95	11.40	12.60	10.20	10.80	12.75
0-2	10.95	11.40	12.60		10.80	12.75
0-3	10.95	11.40	12.60		10.80	12.75
0-5	10.95	11.40	12.60	10.20	10.80	12.75
0-10	10.95	11.40	12.60	10.20	10.80	12.75
0-15	10.95	11.40	12.60	10.20	11.10	13.20
0-25	10.95	11.40	12.60	10.20	11.10	13.20
0-30		11.40	12.60			
0-50	10.95	11.40	12.60	10.20	12.05	15.45
0-100	10.95	11.40	12.60		10.80	12.75
0-150	10.95	11.40	12.60		10.80	12.75
0-200		11.40	12.60		10.80	12.75
0-300		11.40	12.60	10.20	10.80	12.75
0-500		11.40	12.60			
15-0-15		12.15				
30-0-30		12.15				
50-0-50		12.15				

MILLIAMMETERS

Model	1227	1327	1329	1257	1357	1359
Range	DC			AC		
0-1	$10.80	$11.25	$12.00			
0-3	10.80	11.25	12.00			
0-5	10.80	11.25	12.00			
0-10	10.80	11.25	12.00			
0-15	10.80	11.25	12.00			
0-25	10.80	11.55	12.60			
0-50	10.80	11.55	12.60		$10.95	$12.75
0-100	10.80	11.55	12.60		10.95	12.75
0-150	10.80	11.55	12.60			
0-200	10.80	11.55	12.60			
0-250					10.95	12.75
0-300	10.80	11.55	12.60			
0-500	10.80	11.55	12.60	$10.20	10.95	12.75
0-750		11.55	12.60			
0-1000		11.55	12.60			

DC MICROAMMETERS

Range	Approx. Resis. Ohms	Net Each		
		1227	1327	1329
0-15	4800		$21.00	$22.95
0-25*	2200	$17.85	18.60	20.70
0-50*	2000	15.30	15.75	17.10
0-100	2000	13.80	14.40	16.05
0-200	1000	11.70	12.45	13.80
0-500	200	11.25	11.85	13.20
25-0-25	2000		15.90	17.25
50-0-50	2000	13.95	14.55	16.20
100-0-100	1000		12.60	13.95
500-0-500	46		11.40	12.15

*Has external magnet type movement.

RECTIFIER TYPE AC VOLTMETERS

Range	Approx. Resis. Ohms Per Volt	Net Each	
		Model 1347	Model 1349
0-5	1000	$16.20	$17.85
0-10	1000	16.20	17.85
0-15	1000	16.20	17.85
0-50	1000	16.20	17.85
0-150	1000	16.20	17.85
0-150	2000	16.80	18.45
0-300	1000	16.20	17.85

VOLUME LEVEL INDICATORS

Range	Model 1247	Model 1349
Gen. Purpose DB Meter*	$16.35	
VU-Meter—A Scale†		$21.00
VU-Meter—B Scale†		21.00

*Zero power level, 6 mw 500 ohm line; 5000 ohm range.
†With external magnet movement; reference level, 1 mw 600 o line.

RF AMMETERS

Model	Ranges Available (Amps)					Net Each
1337	0-1	0-3	0-5	0-8	0-10	$13.35
1339	0-1	0-3	0-5	0-8	0-10	16.05

DC GALVANOMETERS

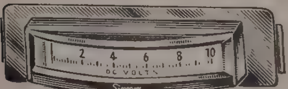
Range	Resistance	Net Each		
		1227	1327	1329
50-0-50*	46 ohms	$10.80	$11.40	
50-0-50†	2000 ohms	12.15	13.35	

Sensitivity: *500-0-500 μa. †75-0-75 μa.

DC MILLIVOLTMETER

0-50	5 ohms	$10.95	$11.40	$12.60

EDGEWISE PANEL INSTRUMENTS



Unusual design permits mounting wherever space is a problem; makes every square inch count on a crowded panel; will solve many of your design problems. Supplied complete with mounting hardware, including bezel with two speed nuts for quick, simple mounting.
Types: Direct Current and AC Rectifier. **Accuracy:** DC, 2% of full scale; AC Rectifier, 5%. **Pointers:** Knife-edge, lance, spade types. **Standard Scale:** Black numbers on white background; 1⅞" long. **Terminals:** Solder or stud type. **Case:** Dustproof, molded lucite. Weight, about 5 oz.

MODEL 1502

DC AMMETERS

Range	Net	Range	Net	Range	Net
0-5	$13.35	0-15	$13.35	0-50	$13.35
0-10	13.35	0-25	13.35		

MODEL 1502 (Continued)

DC VOLTMETERS

Range	Net	Range	Net	Range	Net
0-10	$12.60	0-50	$12.60	0-300	$12.60
0-15	12.60	0-150	12.60	0-500*	12.75

*2,000 ohms/v.

DC MILLIAMMETERS

0-1	$13.05	0-50	$13.05	0-250	$13.05
0-5	13.05	0-100	13.05	0-300	13.05
0-10	13.05	0-150	13.05	0-500	13.05
0-25	13.05	0-200	13.05		

DC MICROAMMETERS

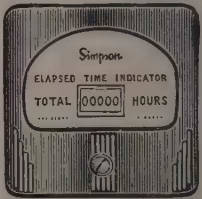
Range	Net Each	Range	Net Each
0-25	$20.70	0-200	$13.95
0-50	18.15	0-500	13.50
0-100	16.05		

MODEL 1507

VU Meters*		AC Voltmeters†	
Range	Net Each	Range	Net Each
"A" Scale	$23.10	0-150	$16.80
"B" Scale	23.10	0-300	16.80

*Volume level indicators. †Rectifier type.

ELAPSED-TIME METER



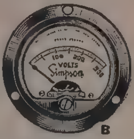
Widely used by research labs, manufact ing plants, broadcasting stations, etc., keep life and performance records based operating time. Use self-starting synch nous clock motors. Indicate up to 9999 then recycle and begin again at 0000 Molded bakelite case similar to the Sin son 3½" rectangular meters. Case dep 2$\frac{9}{16}$" Mounting by four studs, 4-36 thread
Simpson Model 57ET For 120 v., 60 cycles. Net Each **$16**9
Simpson Model 57ET For 240 v., 60 cycles. Net Each **$17**2

Simpson

Accurate Panel Meters

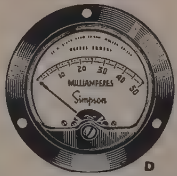
RUMENTS THAT STAY ACCURATE

MILLIAMPERES
Simpson
A

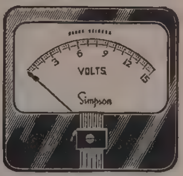


B

5
10
15
20
25
AMPERES
Simpson
C



D



E

RE A—Models 127, 137, 147, 157. 2½" rectangular case. 2⅜"; height, 2⅜". Mounts in round hole. Body diameter, scale length, 1⅞". Bakelite case.

RE B—Models 125, 135, 145, 155. 2½" round case, open face Flange diameter, 2¾"; depth overall, 2⁵⁄₁₆"; body diameter, scale length, 1⅞". Bakelite case.

RE C—Models 27, 37, 47, 57. 3½" rectangular case. Width, ight, 3⅛". Mounts in round hole. Body diameter, 2¾". ength, 2⁹⁄₁₆". Bakelite case.

RE D—Models 25, 35, 45, 55. 3½" round case. Open face Flange diameter, 3½"; depth overall, 2¼"; body diameter, scale length, 2⁹⁄₁₆". Bakelite case.

VOLTMETERS

el	125-127	25-27	29	155-157	55-57	59
e	DC			AC		
	$10.95	$11.40	$12.60	$ 9.60	$10.35	$12.00
	10.95	11.40	12.60	9.60	10.35	12.00
	10.95	11.40	12.60	9.60	10.35	12.00
	10.95	11.40	12.60	....	....	......
	10.95*	11.40*	12.60	9.60*	10.35*	12.00
	10.95	11.40	12.60	9.60*	10.35*	12.00
	10.95	11.40	12.60	10.20	10.65	12.00
	10.95	11.40	12.60	....	....	......
	10.95*	11.40*	12.60	10.20	10.65	12.00
	10.95	11.40	12.60	10.65	11.10	12.00
	10.95*	11.40*	12.60	10.80*	11.55*	12.60
	10.95	11.40	12.60	....	....	......
	10.95	11.40	12.60	10.80	11.55	12.60
	10.95*	11.40*	12.60	10.80*	11.55*	12.60
	11.40	12.00*	13.05	15.60	16.35	17.55
	11.40	12.00	13.05	15.60	16.35	17.55
	13.65	14.25*	15.45	15.60	16.35	17.55
	13.65	14.25	15.45	....	....	......
	13.65	14.25*	15.45	....	....	......
	13.65	14.25	15.45	....	....	......
	13.65	14.25*	15.45	....	....	......
	13.65	14.25*	15.45	....	....	......
	13.65	14.25*	15.45	....	....	......

al resistors are furnished on AC meters having a range of lts or higher. DC 1000 volts or higher.

MILLIAMMETERS

el	125-127	25-27	29	155-157	55-57	59
e	DC			AC		
	$10.20*	$10.65*	$11.85	....	....	......
	10.20	10.65	11.85	....	....	......
	10.20	10.65	11.85	....	....	......
	10.20	10.65	11.85	....	....	......
	10.20*	10.65*	11.85	$ 9.60	$10.35	$12.15
	10.20*	10.65*	11.85	9.60	10.35	12.15
	10.20	10.65	11.85	....	....	......
	10.50*	10.95*	12.45	9.60	10.35	12.15
	10.50*	10.95*	12.45	9.60	10.35	12.15
	10.50	10.95	12.45	....	....	......
	10.50*	10.95*	12.45	9.60	10.35	12.15
	10.50	10.95	12.45	....	....	......
	10.50*	10.95*	12.45	....	....	......
	10.50	10.95	12.45	9.60	10.35	12.15
	10.50*	10.95*	12.45	....	....	......
	10.50*	10.95*	12.45	9.60	10.35	12.15
	10.50	10.95	12.45	....	....	......
	10.50	10.95	12.45	....	....	......

AMMETERS

el	†125-127	†25-27	†29	‡155-157	‡55-57	‡59
ge	DC			AC		
	$10.35	$10.80	$12.00	$ 9.60	$10.20	$12.15
	10.35	10.80	12.00	9.[illegible]0	10.20	12.15
	10.35	10.80	12.00	9.60	10.20	12.15
	10.35	10.80	12.00	9.60	10.20	12.15
	10.35	10.80	12.00	9.60	10.20	12.15
	10.35	10.80	12.00	9.60	10.20	12.15
	10.35	10.80	12.00	9.60	10.20	12.15
	10.35	10.80	12.00	9.60	10.50	12.75
	10.35	10.80	12.00	9.60	10.50	12.75
	10.35	10.80	12.00	9.60	11.40	14.85
15	10.95	11.55	12.75	....	....	......
30	10.95	11.55	12.75	....	....	......
50	10.95	11.55	12.75	....	....	......

Write for prices on external shunts and transformers.

C ammeters are self-contained for ranges up to and includ-0 amperes. High range DC amperes can be supplied with nal shunts and include 6 foot leads. Higher range AC am-s can be supplied with external current transformers and e 2-foot leads. Also available in ranges: †75, 100, 150, 200, 300, 500, 750 and 1000; ‡75, 100, 150, 200, 250, 300 and 500.

DC GALVANOMETERS

ale	Sensitivity Micro-Amperes	Resistance	Model 125-127	Model 25-27
0-50	500-0-500	46 ohms	$10.20	$10.80
0-50	75-0-75	2000 ohms	11.55	12.75

FIGURE E—Models 29, 39, 49, 59. 4½" rectangular case. Width, 4²¹⁄₃₂"; height, 4¹³⁄₆₄". Mounts in round hole. Body diameter, 2¾". Scale length, 3²⁹⁄₃₂". Bakelite case.

ILLUMINATED DIALS

The 2½" and 3½" rectangular instruments indicated (*) in tables below are also carried in stock with lucite illuminated dials. Supplied complete with socket and 6 volt bulb for additional Dealer Net of **$1.95.** 2½" R.F. ammeters lucite illum. must be supplied with external thermocouple. Add **$5.55** to Net for couple. **All instruments calibrated for use on non-magnetic panels.**

ALL PRICES ARE DEALER NET

WATTMETERS—DYNAMOMETER TYPE

Range Watts	Max. Volts	Max. Amps	Model 175-177	Model 75-77	Model 79
0-75	150	1.0	$22.65	$24.15	$31.35
0-150	150	2.0	22.65	24.15	31.35
0-300	150	4.0	22.65	24.15	31.35
0-750	150	10.0	22.65	24.15	31.35
0-600	300	4.0	25.20	26.40	33.75
0-1500	300	10.0	25.20	26.40	33.75
0-3000	300	20.0	25.20	26.40	33.75

MICROAMMETERS

Model	125-127	25-27	29
Range	DC		
0-15	....	$21.00	$22.95
0-25	$17.85	18.60	20.70
0-50	15.30	15.75	17.10
0-100	13.20	13.80	15.45
0-200	11.10	11.85	13.20

MILLIVOLTMETERS

Model	125-127	25-27	29
Range	DC		
0-50	$10.35	$10.80	$12.00
0-100	10.35	10.80	12.00

AC VOLTMETERS—RECTIFIER TYPE

Range	Approximate Resistance	Model 45-47	Model 49
0-1	1000 ohms per volt	$15.60	$17.25
0-3		15.60	17.25
0-5		15.60	17.25
0-10		15.60	17.25
0-15		15.60	17.25
0-50		15.60	17.25
0-100		15.60	17.25
0-150		15.60	17.25
0-300		15.60	17.25
0-1	2000 ohms per volt	16.20	17.85
0-3		16.20	17.85
0-5		16.20	17.85
0-10		16.20	17.85
0-15		16.20	17.85
0-50		16.20	17.85
0-100		16.20	17.85
0-150		16.20	17.85
0-300		16.20	17.85

AC MILLAMMETERS—RECTIFIER TYPE

0-1	600 ohms	$15.45	$16.80
0-2	400	15.45	16.80
0-5	200	15.45	16.80

AC MICROAMMETERS—RECTIFIER TYPE

0-100	3400 ohms	$18.60	$20.10
0-200	2400	16.35	18.00
0-300	1800	16.20	17.70
0-500	1200	15.90	17.40

RF AMMETERS—INTERNAL THERMOCOUPLE TYPE

Range	Approximate Resist., Ohms	Model 135-137	Model 35-37	Model 39
0-1	.205	$11.40*	$12.75*	$15.45
0-1.5	.177	11.40	12.75	15.45
0-2	.104	11.40*	12.75*	15.45
0-2.5	.088	11.40	12.75	15.45
0-3	.076	11.40*	12.75*	15.45
0-5	.039	11.40*	12.75*	15.45
0-8	.025	11.40	12.75	15.45
0-10	.021	11.40	12.75	15.45

RF MILLIAMMETERS

0-115†	....	....	$26.10	....
0-150	4.5	....	15.45	$17.70
0-250	3.0	....	15.45	17.70
0-500	.6	....	15.45	17.70

†0-100 linear scale—50 divisions.

VOLUME LEVEL INDICATORS—DB METERS

Zero Power Level—6 milliwatts. 500 ohm line.

Description	Models 145-147	45-47	49
GP Type, −10 to +6 db, 5000 ohms	$15.75	$15.90	$17.40
Hi-Speed type, same specs.	....	16.95	18.15
Lo-Speed type, same specs.	....	16.95	18.15

VU METERS—Reference Level, 1 milliwatt. 600 ohm line.

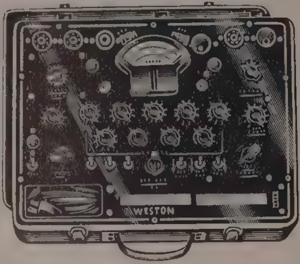
Not Illum. A or B Scale. 3900 ohms	....	$19.20	$20.40†
Illuminated A or B Scale. 3900 ohms	....	....	23.40†

†Model 142—4" Rectangular.

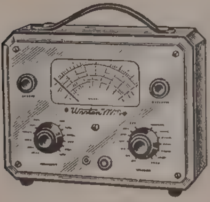
Test Equipment and Probes

WESTON TEST INSTRUMENTS

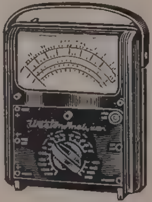
MODEL 981 (TYPE 3) GM TUBECHECKER



All DC potentials are filtered, permitting transconductance measurements as high as 30,000 micromhos. Precision voltage divider net and switch determines value of signal voltages to be applied to tube (0.65, 1.3, 2.6, 5.2 v. peak-to-peak at 5000 cps). Two-range grid bias control (0-5, 0-20). A 600 ma. constant current source for checking warm-up type tubes used in series string TV is provided. DC potentials are 90, 130, 220 volts. AC potentials of 22, 44 and 160 volts also available. **Roll index chart** includes latest TV color tubes. **Subminiature Tubes:** 45 volt potential. Single socket for each tube base, regardless of connection. Five-position leakage control, each position isolating a specific tube element, and circuit to determine small leakages between elements. Provides measurement as high as 5 megohms between elements. Red line on ohms scale equivalent value that causes neon bulb to glow in conventional short test circuits. Three toggle switches enable rapid checking of **twin section tubes. Multiple Switching** facilities protect against obsolescence. **Fil. Volt.:** 0.65, 1.1, 1.5, 2, 2.5, 0.6a, 3.3, 5, 6.3, 7.5, 10, 13, 20, 27.5, 35, 47, 70, 115. **Ranges:** 2.5 up to 30,000 micromhos. **Power Required:** 100-125 volts, 60 cps single phase, 30 watts. Gray hammertone steel case. **Size:** 17.50" x 13.25" x 6.00". Approximate weight, 23.5 lbs.
Weston Model 981 (Type 3) **Tubechecker**—Price Each **$283.50**



MODEL 982



MODEL 980

MODEL 982 VACUUM TUBE VOLTMETER

Self-contained, battery operated. Consumes less than 25 milliwatts. Peak-to-peak measurements; no switching of leads is required. **Range Function Switch:** makes negative and positive DC potentials measurable directly. **Input Impedance:** 10 megs on DC, 2.8 megs AC RMS, 1 meg AC Peak-to-Peak. **No Zero Scale Drift. DC Isolator Adapter:** Makes DC measurements possible in the presence of AC voltages. **Frequency Response:** Suitable for measurement of TV wave forms. **Low Capacitance Adapter:** Makes peak-to-peak measurements possible with an input impedance of 10 megohms shunted by only 15 micromicrofarads. Prevents circuit loading. **Ranges:** DC VOLTS—1.6, 8, 40, 160, 400, 800, 1600. AC VOLTS: 1.6, 8, 40, 160, 400, 800, 1200. PEAK-TO-PEAK VOLTS—Same as DC. OHMS, X1 meg, X100K, X10K, X1K, X100, X10, X1 (10 ohms center). **Battery Life:** Battery A, approx. 90 days (1.5 volts Size D Cell); Battery B, shelf life approx. 1 year. **Scale Length:** 4.63". **Case:** Gray hammertone finished steel, aluminum panel, black etched. **Size:** 10" x 7.38" x 3.63". Weight (inc. batteries), 6 lbs.
Weston Model 982 Vacuum Tube Voltmeter—Price Ea. **$78.25**

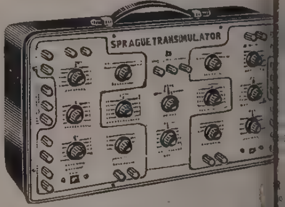
MODEL 980 MARK II ANALYZER

Highly sensitive, accurate and rugged instrument with a combination of ranges providing a wide range of measurement applications in the electronic field. **Sensitivity: DC,** 20,000 ohms/volt; **AC,** 1000 ohms/volt. **Accuracy:** 2% DC, 3% AC. **Scale Length:** 4.63". **Ranges:** DC VOLTS and AC VOLTS, 1.6, 8, 40, 160, 400, 1600. DB RANGE, −15 db to +54 db (6 ranges). DC MILLIAMPS, 8, 80, 800. DC MICROAMPS, 80. DC AMPS, 8. OHMS: RX10,000, X1000, X100, X10, X1 (25 ohms center scale). Comes with a new four-way cover that is a combination cover and stand. Stores test leads and instruction book; can be used as a protective cover, a horizontal stand, a vertical stand or as a tilt stand (illustrated without cover). **Case:** Black molded bakelite with engraved white markings. **Size:** 6¼" x 7 9/16" x 3". Approximate weight, 2 lbs., 8 oz.
Weston Model 980 Mark II **Analyzer**—Price Each.... **$44.50**

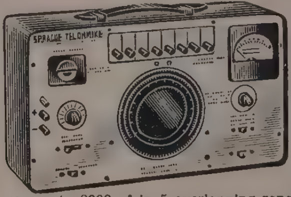
WRITE FOR LITERATURE AND PRICES ON OTHER WESTON TEST EQUIPMENT AND ACCESSORIES.

SPRAGUE TEST INSTRUMENTS

NEW MODEL LF-1 TRANSIMULATOR®



Provides all circuit constants and voltages needed to "breadboard" virtually any transistor stage. Handles p-n-p, n-p-n, and surface barrier types in grounded emitter, grounded base, or grounded collector configurations. Can be set to simulate AC-coupled, or direct coupled amplifier stages; also multivibrators, switching, phasing, and various push-pull circuits. several Transimulators to "breadboard" cascade amplifiers multi-transistor devices. Circuit constants: 2 μf, 20 μf, and di coupling; bias resistance variable to 555,000 ohms; load resista variable to 277,500 ohms; emitter resistance variable to 2, Base collector stability variable to 250,000 ohms; voltage divi stability variable to 50,000 ohms. Provides voltages of 1.5, 3, 6 DC, with polarity reversal switch. All points brought ou 5-way binding posts for external coupling devices, additi bypass capacitors, metering, etc. Less batteries.
Sprague Model LF-1—Net Each.................... **$79**



MODEL TO-5 TEL-OHMIKE ANALYZER

A "must" for mod service shops; mo ately priced ins ment with laborat quality. Highest curacy of any ins ment of its type av able to the ser technician. Cap tance bridge m ures up to 2000 μf in 5 overlapping ranges (including exclu 1-100 μμf range). Reads insulation resistance directly up to 20 megs for paper, ceramic, and mica capacitors. Continuously adj able power applies exact rated voltage to electrolytics for leak readings. Also reads power factor of electrolytics up to 55% triple-range Wien bridge. Turns ratio scale for power and s transformers. Magic-eye tube simplifies bridge balancing capacitance and power factor measurements. Push button ra selection; magic-eye bridge balance indicator; safety capa discharge. two-tone gray; 8⅞" high x 14⅝" wide x 6⅛" Weight, only 12½ lbs.

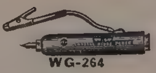
Sprague Model TO-5—115 v. AC, 50-60 cycles. Net... **$83**

Sprague Model TO-5X—115-230 v. AC, 25-60 cycles. Net Each.................................... **$89.**

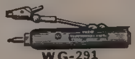
Sprague Model TO-5RM—Standard 19" x 10½" rack panel mounted model. Net Each.................... **$93**

*Trademark

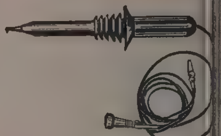
RCA TEST PROBES



WG-264



WG-291



WG-289

Model WG-220—Direct Probe and Cable for 'scopes with b posts. Net Each.. **$3**

Model WG-264—Crystal Diode Probe for use with VoltOhmys Net Each.. **$7**

Model WG-289—Hi-Voltage Probe. Microphone conn. Net **$7**

Model WG-291—Crystal Diode Demodulator Probe for WG above. Net Each.. **$7**

Model WG-297—Extends range of WV-77E (K) to 50,00 Net Each.. **$7**

Model WG-299C—DC-AC/Ohms Probe and Cable designed use with VoltOhmysts®; replaces Models WG-217, WG-218 WG-222. Net Each.. **$8**

Model WG-300B—Direct/Low Capacitance Probe and Cabl use with WO-91A and WV-74A. Net Each.............. **$9**

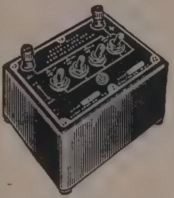
Model WG-301A—Slip-on Probe for WG-299C. Increases quency range of VoltOhmysts® to 250 mc. Net Each.... **$7**

Model WG-302A—RF/IF/VF Signal Tracing Probe, slip WG-300B. Net Each.. **$8**

·st Equipment, Panel Meters

CORNELL-DUBILIER TEST EQUIPMENT

·ODEL CDE ELECTROLYTIC CAPACITOR SUBSTITUTION BOX



·s a reliable, flexible capacitance ·stitution purposes in a wide · of service and experimental ·ic and electrical applications. · replacement capacitor value ·etermined directly from values ·d on the box. Selection of 15 ·tions available. Unit can be ·ividually or can be connected ·lel with other similar units to · an unlimited range of higher ·nces. Long-life, etched cath- ·ripple, all-purpose type capac- ·specially suited for selenium · applications. **Capacitance** ·10-150 µf, in 10 µf steps. **Volt- ·age:** 450 v., DC, maximum. · x 3⅝″ x 3″. Weight, 1 lb., 8 oz.

·Dubilier Model CDE Electrolytic Capacitor ·tion Box—Net Each........................ $12.50

MODEL BN CAPACITOR BRIDGE

Accurately measures capacity of paper, mica, electrolytic and air capacitors from .00001 µf to 50 µf. Indicates power factor of electrolytic capacitors by means of visual eye detector tube. Detects open and short circuits, high and low capacity and high power factor. May be used as continuity meter. For operation on 110 v., 60 cps. Employs Wien bridge circuit for all measurements. Accuracy independent of line voltage variations. Visual eye bridge balance. Direct reading scale with all markings in microfarads. No charts or multipliers required. The bridge is complete in itself and requires no headphones, stand- ·ernal meters, etc. **Size:** 3⅝″ x 5″ x 3″. In walnut bakelite ·h leads and instructions. Weight, 2 lbs.

·Dubilier Model BN Bridge—Net Each........ $27.45

RESISTOR DECADES

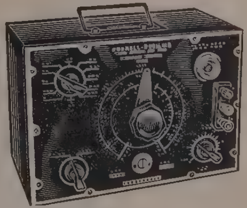
·le source of resistance for substitution ·s in a wide variety of electrical and ·ic applications. Units of resistance may ·ted from the direct-reading panel- ·cale. Each instrument permits possible · of 110 resistance values. **Model RDA** ·110 ohms in 1-ohm steps. 1-10 Ohm · 1 amp max., ±5%; wire-wound, 10- ·n Range: 0.5 amp max., ±3%; non- ·e-wound. **Model RDB**—100 to 11,000 100-ohm steps. 100-1,000 Ohm Range: 100 ma max.; ±3%, wire-wound. 1,000-10,000 Ohm Range: 50 ma max., ±3%, non-ind. wire-wound. **Model RDC**—10,000 to 1,111,110 ohms in 10,000-ohm steps. 10K-100K Ohm Range: 5 ma, ±1%; carbon precision. 100K-1 Megohm Range: 2 ma, ±1%; carbon precision. **Size** (all Models): 3⅝″ x 5″ x 3″. Weight, 1 lb., 5 oz.

Cornell-Dubilier Model RDA Decade—Net Each..... $13.35

Cornell-Dubilier Model RDB Decade—Net Each......$13.75

Cornell-Dubilier Model RDC Decade—Net Each...... 13.75

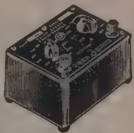
CAPACITOR-RESISTOR BRIDGE



Measures capacity of most capacitors; capacity between wires and shielding; power factor to 50%; leakage in electrolytics; insulation resistance of paper, mica and ceramic capacitors; resistance from 100 to 5,000,000 ohms. Range .00001 to 1000 µf. Detects shorts, opens and intermittents. Sharp definitive readings. Direct reading scales. Polarizing voltages 25, 150, 250, 350 and 450 volts DC. Visual-eye Null Indicator. Protected against after-test capacitor-change shock. **Size:** 5½″ x 7″ x 10″. Weight, 8¼ lbs.

Cornell-Dubilier Model BF-60—Complete with tubes. Net Each.. $47.15

CAPACITOR DECADES



Provide accurate standards over a wide range of capacity. May be used in groups of three decades, or individually for maximum flexibility. Each decade is furnished with calibration chart giving exact capacity values for all scale markings, extending use to more precise measurements. Rated Voltage—600 v. DC, 200 v. AC.

C-D Model	Capacity	Tolerance	Dielectric	Net Each
CDA 5	.011 µf in .0001 µf steps	±5%	Mica	$12.50
CDB 5	1.1 µf in .01 µf steps	±5%	Oil-Paper	12.50
CDB 3	1.1 µf in .01 µf steps	±3%	Oil-Paper	14.85
CDC 5	10.0 µf in 1.0 µf steps	±5%	Oil-Paper	21.95
CDC 3	10.0 µf in 1.0 µf steps	±3%	Oil-Paper	24.20

J-B-T VIBRATING REED FREQUENCY METERS

JBT
58 60 62
CYCLES

J-B-T Vibrating Reed Frequency Meters are used extensively in radio, telephone and television service, on engine generator sets, in laboratories, in many types of electronic equipment—wherever constant or known frequency is important to efficient operation of equipment.

MODEL 31-F

This is used in standby power equipment. It is handy for measuring frequency of power source. Five reeds, 58-62 cycles, 100-130 volts. 110 ohms/volt; 1 watt power consumption. Accuracy ±0.3% at reference temperature. Flush panel mounting. Depth behind panel, ·l. lugs. Dia., 2⁹⁄₁₆″; Incl. flange. 3¼″.

·Model 31-F—Net Each........................ $24.65

MODEL 31-FX

·Model 31-F in a 3½″ molded case, MIL-M-6A mounting.

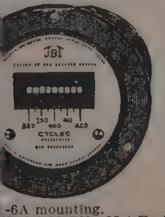
·Model 31-FX— ·ch.. $23.65

MODEL 31-FHXX

· 31-F in a sealed case, glass-to-metal construction, with ·erminals. Maximum barrel diameter 2¹¹⁄₁₆″ (2¾″ panel ·ng hole recommended); 2⅞″ overall depth behind flange; ·d on three flange holes for 6-32 screws on 1.58″ radius, ·able flange.

·Model 31-FHXX—Net Each................ $30.45

MODEL 33-F



400 cycle type. Used for measuring frequency of high-cycle power sources, including new, heavy aircraft. Accuracy ±0.3%. Nine reeds, 380 to 420 cycle range. 100 to 130 volts; 90 ohms per volt; 1.5 watts power consumption. Flush panel mounting. Same dimensions as Model 31-F.

J-B-T Model 33-F Net Each............. $35.10

MODEL 33-FX

Model 33-F in a 3½″ molded case, ·-6A mounting.

·Model 33-FX—Net Each...................... $34.10

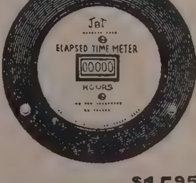
MODEL 31-FE ELAPSED TIME AND FREQUENCY METER

JBT
58 60 62
CYCLES PER SECOND
00000
ELAPSED TIME

This unique panel instrument combines the elapsed time or running time meter with frequency reeds. It is widely used on motor generator sets and on electrical equipment where maintenance routine calls for periodic servicing. Reads 0-9,999.9 hours; 58-62 cycles at 100-130 volts. Self-starting. Tenths shown in red numerals, all others black. Meter panel 2⁹⁄₁₆″ (2⅝″ panel mounting hole recommended); depth behind flange, 4¹¹⁄₁₆″. Front mounting same as Model 31-F. Variations with 7, 9 or 11 reeds on special order only. 3¼″ metal case.

J-B-T Model 31-FE—Net Each.................... $33.00

MODEL 31-EX 60 CYCLE ELAPSED TIME METER



To record operating of AC electrical and electronic equipment, this instrument registers in 1/10th hour steps to 9,999.9 hours, then automatically resets. Shows tenths in red numerals, all others in black. Molded case fully encloses all parts. Popular for tube life, TV equipment, punch presses, conveyors, oil burners, maintenance schedules, etc. Meter panel 2⁹⁄₁₆″ (2⅝″ hole recommended); depth behind flange, 2¹⁵⁄₁₆″.

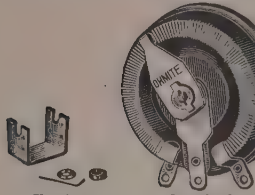
J-B-T Model 31-EX—110-125 volt. Net Each......... $15.95

J-B-T Model 31-EX-200—230 volt. Net Each.........$17.05

J-B-T Model 31-ES—(Square Case 3″ x 3″) 110-125 volts. Net Each................................ $17.05

OHMITE® Precision Controls

ALL PORCELAIN VITREOUS ENAMELED RHEOSTATS


Tandem Kit
Standard Rheostat

Dissipate heat rapidly: Insulated shafts and bushings. Copper-graphite contacts. Ratings for "free air" use.

MODEL "H" 25 WATT

Dia., 1⁹⁄₁₆″. Depth behind panel, 1⅜″.

Ohmi. No.	Res. Ohms	Net Each	Ohmi. No.	Res. Ohms	Net Each
0140	1	$4.62	0152	125	$4.11
0141	2	4.11	0153	175	4.11
0142	3	4.11	0154	250	4.11
0143	6	4.11	0155	350	4.11
0144	8	4.11	0156	500	4.11
0145	10	4.11	0157	750	4.11
0146	15	4.11	0158	1000	4.62
0147	25	4.11	0159	1500	4.62
0148	35	4.11	0160	2500	4.62
0149	50	4.11	0161	3500	4.86
0150	75	4.11	0162	5000	4.86
0151	100	4.11			

MODEL "J" 50 WATT

Dia., 2⁵⁄₁₆″. Depth behind panel, 1⅜″.

Ohmi. No.	Res. Ohms	Net Each	Ohmi. No.	Res. Ohms	Net Each
0308	0.5	$5.16	0321	150	$4.62
0309	1	5.16	0322	225	4.62
0310	2	5.16	0323	300	4.62
0311	4	4.62	0324	500	4.62
0312	6	4.62	0325	800	4.86
0313	8	4.62	0326	1000	4.86
0314	12	4.62	0327	1600	4.86
0315	16	4.62	0328	2500	4.86
0316	22	4.62	0329	3500	5.16
0317	35	4.62	0330	5000	5.16
0318	50	4.62	0331	8000	5.16
0319	80	4.62	0332	10000	5.16
0320	125	4.62			

MODEL "G" 75 WATT

Dia., 2¾″. Depth behind panel, 1¾″.

Ohmi. No.	Res. Ohms	Net Each	Ohmi. No.	Res. Ohms	Net Each
1100	0.5	$6.96	1112	200	$6.42
1101	1	6.96	1113	300	6.42
1102	2	6.96	1114	400	6.42
1103	3	6.96	1115	500	6.42
1104	5	6.42	1116	750	6.96
1105	7.5	6.42	1117	1000	6.96
1106	10	6.42	1118	1500	6.96
1107	16	6.42	1119	2000	6.96
1108	25	6.42	1120	2500	6.96
1109	50	6.42	1121	5000	7.44
1110	75	6.42	1122	7500	7.98
1111	100	6.42	1123	10000	7.98

MODEL "K" 100 WATT

Dia., 3⅛″. Depth behind panel, 1¾″.

Ohmi. No.	Res. Ohms	Net Each	Ohmi. No.	Res. Ohms	Net Each
0440	0.5	$7.74	0452	200	$7.23
0441	1	7.74	0453	300	7.23
0442	2	7.74	0454	400	7.23
0443	3	7.74	0455	500	7.23
0444	5	7.74	0456	750	7.23

MODEL "K" 100 WATT—CONTINUED

Ohmi. No.	Res. Ohms	Net Each	Ohmi. No.	Res. Ohms	Net Each
0445	7.5	$7.23	0457	1000	$7.74
0446	10	7.23	0458	1500	7.74
0447	16	7.23	0459	2000	7.74
0448	25	7.23	0460	2500	7.74
0449	50	7.23	0461	5000	8.22
0450	75	7.23	0462	7500	8.76
0451	100	7.23	0463	10000	9.24

MODEL "L" 150 WATT

Diameter, 4″. Depth behind panel, 2″.

Ohmi. No.	Res. Ohms	Net Each	Ohmi. No.	Res. Ohms	Net Each
0524	0.5	$9.78	0537	150	$9.24
0525	1	9.78	0538	200	9.24
0526	2	9.78	0539	250	9.24
0527	3	9.78	0540	350	9.24
0528	5	9.78	0541	500	9.24
0529	7.5	9.78	0542	750	9.78
0530	10	9.24	0543	1250	9.78
0531	15	9.24	0544	1800	10.32
0532	25	9.24	0545	2250	10.32
0533	35	9.24	0546	3000	10.32
0534	50	9.24	0547	4500	10.80
0535	75	9.24	0548	7500	11.34
0536	100	9.24	0549	10000	12.36

MODEL "P" 225 WATT

Diameter, 5″. Depth behind panel, 2⅛″.

Ohmi. No.	Res. Ohms	Net Each	Ohmi. No.	Res. Ohms	Net Each
1250	1	12.84	1261	100	12.84
1251	2	12.84	1262	150	12.84
1252	3	12.84	1263	200	12.84
1253	4	12.84	1264	300	12.84
1254	5	12.84	1265	400	12.84
1255	7.5	12.84	1266	700	12.84
1256	10	12.84	1267	900	12.84
1257	15	12.84	1268	1200	12.84
1258	25	12.84	1269	1500	12.84
1259	50	12.84	1270	1750	12.84
1260	75	12.84	1271	2500	12.84

MODEL "N" 300 WATT

Diameter, 6″. Depth behind panel, 2⅜″.

Ohmi. No.	Res. Ohms	Net Each	Ohmi. No.	Res. Ohms	Net Each
0650	1	13.92	0661	100	13.92
0651	2	13.92	0662	150	13.92
0652	3	13.92	0663	200	13.92
0653	4	13.92	0664	300	13.92
0654	5	13.92	0665	400	13.92
0655	7.5	13.92	0666	700	13.92
0656	10	13.92	0667	900	13.92
0657	15	13.92	0668	1200	13.92
0658	25	13.92	0669	1500	13.92
0659	50	13.92	0670	1750	13.92
0660	75	13.92	0671	2500	13.92

MODEL "R" 500 WATT

Diameter, 8″. Depth behind panel, 2⅛″.

Ohmi. No.	Res. Ohms	Net Each	Ohmi. No.	Res. Ohms	Net Each
0849	1.0	20.10	0872	50	20.10
0850	1.5	20.10	0861	80	20.10
0851	2	20.10	0862	125	20.10
0852	2.5	20.10	0863	175	20.10
0853	3	20.10	0864	250	20.10
0854	4	20.10	0865	325	20.10
0855	5	20.10	0866	500	20.10
0856	8	20.10	0867	750	20.10
0857	12.5	20.10	0868	1000	20.10
0858	16	20.10	0869	1500	20.10
0859	25	20.10	0870	2000	20.10
0860	40	20.10	0871	2500	20.10

MODEL "T" 750 WATT

Diameter, 10″. Depth behind panel, 3″.

Ohmi. No.	Res. Ohms	Net Each	Ohmi. No.	Res. Ohms	Net Each
1300	1	28.38	1312	50	28.38
1301	1.5	28.38	1313	80	28.38
1302	2	28.38	1314	100	28.38
1303	2.5	28.38	1315	160	28.38

MODEL "T" 750 WATT—CONTIN

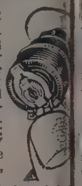
Ohmi. No.	Ohms Res.	Net Each	Ohmi. No.	Ohms Res.
1304	3	28.38	1316	200
1305	4	28.38	1317	300
1306	5	28.38	1318	400
1307	8	28.38	1319	600
1308	10	28.38	1320	750
1309	12.5	28.38	1321	1200
1310	16	28.38	1322	1800
1311	25	28.38	1323	2500

MODEL "U" 1000 WATT

Diameter, 12″. Depth behind panel,

Ohmi. No.	Ohms Res.	Net Each	Ohmi. No.	Ohms Res.
1450	1	33.15	1462	50
1451	1.5	33.15	1463	75
1452	2	33.15	1464	100
1453	2.5	33.15	1465	175
1454	3	33.15	1466	225
1455	4	33.15	1467	300
1456	5	33.15	1468	400
1457	8	33.15	1469	500
1458	10	33.15	1470	750
1459	12.5	33.15	1471	1000
1460	16	33.15	1472	1500
1461	25	33.15	1473	2500

MODEL E 12½ WATT MINIATURE RHEOSTAT



Full 12½ watts dissipation, yet is no larger than many one or two-watt potentiometers. Ceramic and metal construction assures linear derating from full wattage at 40° C to zero watts at 340° C. Vitreous enamel coating. Resistance tolerance, ±10%. **Size:** ⅞″ dia. x ¹¹⁄₁₆″ d. behind panel; mounts on ⅛″ panel by ¼″—32 bushing. Complete with knob. Rotation 300°, ±5%.

Ohmite Nos. 0101, 0119, 0120 and $
0121—Net Each.................
Ohmite Nos. 0102 thru 0118—Net $4
Ohmite Nos. 0122 and 0123—Net 4

Ohmi. No.	Res. Ohms	Max. Amps	Ohmi. No.	Res. Ohms
0101	1	3.53	0113	125
0102	2	2.50	0114	175
0103	3	2.04	0115	250
0104	6	1.44	0116	350
0105	8	1.25	0117	500
0106	10	1.12	0118	750
0107	15	.91	0119	1000
0108	25	.71	0120	1500
0109	35	.60	0121	2500
0110	50	.50	0122	3500
0111	75	.41	0123	5000
0112	100	.35		

TANDEM COUPLING KITS

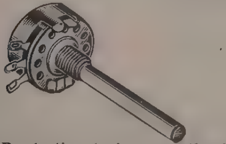
For quick, inexpensive tandem rh assembly. Kit includes steel "U" coupling with set screw, mica washer, wrench and instructions.

Ohmite No. 6532—Small kit mounts H or J rheostats and Model G, K, or rear position. Net Each..........$

Ohmite No. 6533—Large kit mounts G, K or L rheostats and Models H or rear position. Net Each..........$2

Ohmite No. 6591—Miniature kit co two Model E rheostats. Net Each.$

TYPE AB MOLDED COMPOSITION POTENTIOMETER



Type AB potentiometer is an exceptionally high quality unit designed especially for industrial, laboratory, radio service and other uses where reliability is particularly important. Because the resistor element is molded, the unit has an exceptionally large safety factor. The power rating of two watts is unusual for a unit of such small size. The unit has a very low noise level and low voltage coefficient. It will pass the Army-Navy 200 hour salt spray test. **Size:** 1¹⁄₁₆″ diameter, extends ⁹⁄₁₆″ behind panel; shaft length 2″ including ⅜″ bushing. SPST switch to be attached to back of control can be supplied extra. This switch is off at the extreme counterclockwise shaft position. It is rated 2 amperes at 125 volts and is Underwriters' approved. Also rated 10 amperes at 10 volts.

Type CU—50 ohms thru 5.0 megs. stock resistances only.† Net Each. **$1⁹⁵**

Type CA & CB—Stock values only. Net Each...................... **$2²⁵**

Type CLU—50 ohms through 5.0 megohms. Linear values only. 1¹⁄₁₆″ diameter; extends ⁹⁄₁₆″ behind panel; shaft length ⅝″ including slotted bushing. For ⅛″ maximum panel.
Net Each...................... **$2⁵⁵**

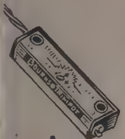
Type CCU Dual Potentiometer—Available in these values: 10,000 (CCU-1031), 25,000 (CCU-2531), 50,000 (CCU-5031) and 100,000 ohms (CCU-1041); .25 (CCU-2541), .5 (CCU-5041) and 1 meg (CCU-1052). Dimensions same as Type CU except add ⁹⁄₁₆″ to extension behind panel. Net Each................ **$5⁸⁵**

Type CS-1—Switch for AB pot.
Net Each........................**$0.66**

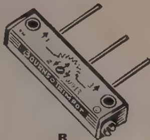
†Other stock values, not listed, include 150, 350, 750, 1500, 3500, 7500, 15K, 35K, 75K, 150K, 350K, 750K, 1.5* meg. and 3.5* meg. resistances.

Total Ohms, ± 10%. (* ± 20%)	Resistance Rotation Characteristics (Taper		
	Locking Shaft Stock No. Prefix CLU-	Linear Stock No. Prefix CU-	Clockwise Log. Stock No. Prefix CA-
50	5001	5001	......
100	1011	1011	......
250	2511	2511	......
500	5011	5011	......
1000	1021	1021	......
2500	2521	2521	......
5000	5021	5021	......
10,000	1031	1031	......
25,000	2531	2531	......
50,000	5031	5031	......
.10 Meg.	1041	1041	1041
.25 Meg.	2541	2541	2541
.5 Meg.	5041	5041	5041
*1 0 Meg.	1052	1052	1052
*2 5 Meg.	2552	2552	2552
*5.0 Meg.	5052	5052	......

Bourns TRIMPOT® Potentiometers



A



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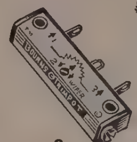
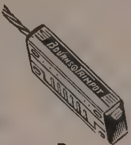
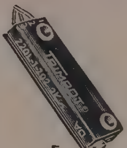


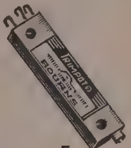
C



D



E



F

NIATURE POTENTIOMETERS

ire space-saving configuration; fine, -turn settings and stable, self-locking 3. Commercial and MIL spec. models wire-wound or carbon elements in terminal styles to meet all re- nents.

LITARY STANDARD WIRE- OUND POTENTIOMETERS

POT® MODEL 200 (FIG. A, B, C)

aces old series 120-1, 130 and 205. r Rating: 0.25 watt. End Settings: % or 0-0.5 ohm, whichever is larger. Operating Temperature: 105°C. d against sand and dust; splash- . Size: 5/16″ h. x 1/4″ w. x 1 1/4″ l. **Avail- n L, S or P terminals; see below for nal data (*), standard resistance s (†), and panel mount version (‡).**

nst†	Net Each, Lots of		
	1-9	10-24	25-49
10K	$4.86	$4.50	$4.05
25K	6.48	6.00	5.40
	7.56	7.00	6.30

I-R® TRIMPOT® MODEL 207 (FIG. D)

aces old series 207. Sealed against and dust; splash-proof; available in dity-proof model on special order. r Rating: 2.0 watts. End Settings: or 1.0 ohm. Max. Operating Temper- : 175° C. Size: 13/16″ h. x 9/32″ w. x l. **Available in L terminals only; see for terminal data (*) and standard tances (†)**

mst†	Net Each, Lots of		
	1-9	10-24	25-49
50K	$10.26	$ 9.50	$8.55
	11.88	11.00	9.90

TWINPOT® MODEL 209

aces old series 209. Dual-element, d against sand and dust; splash-proof; able in humidity-proof model on spe- order. Power Rating: 0.25 watt. End ngs: 0-0.1% or 0-0.5 ohm, whichever rger. Max. Operating Temperature: C. Size: 5/16″ h. x 1/2″ w. x 1 1/4″ l. **able in L terminals only; see below terminal data (*) and standard tances (†).**

mst†	Net Each, Lots of		
	1-9	10-24	25-49
10K	$12.96	$12.00	$10.80
	14.58	13.50	12.15

RIMPOT® MODEL 220 (FIG. E)

idity-proof design. Sealed unit so that 17 of them will fit in 1 sq. in. of l. Sealed against sand and dust; hu- ty-proof; splash-proof. Power Rating: att. End Settings: W terminal, 0-0.1% .5 ohm; L terminal, 0.1% or 1.0 ohm, hever is larger. Max. Operating Tem- ure: 175° C. Size: .315″ h. x .17″ w. l. **Available in W and L terminals; elow for terminal data (*), standard tances (†), and panel mount ver- (‡).**

hms†	Net Each, Lots of		
	1-9	10-24	25-49
o 10K	$ 8.64	$8.00	$7.20
	10.26	9.50	8.55

RIMPOT® MODEL 224 (FIG. F)

temperature humidity proof design. ts MIL-STD-202A specifications. Size: w. Power Rating: 1 w. at 70° C;.5 w. 5° C. Temperature Range: −65° C to 5° C. Sealed in high temperature ic case. Ceramic winding card plus rweld® termination. Mtg. Ctrs., 1.0″. **lable in S, L, and P terminals; see w for terminal data (*), standard re- nces (†), and panel mount version (‡).**

Ohms†	Net Each, Lots of		
	1-9	10-24	25-49
10K	$7.02	$6.50	$5.85
	8.64	8.00	7.20
	9.18	8.50	7.65

TRIMPOT® MODEL 236 (FIG. A, B, C)

Sealed unit replaces old series 230, 233 and 234. Sealed against sand and dust; splash-proof; humidity-proof. Power Rating: 0.8 watt. End Settings: 0-0.1% or 0-0.5 ohm, whichever is larger. Max. Operating Temperature: 135° C. Size: 23/64″ h. x 19/64″ w. x 1 11/32″ l. **Available in L, S, and P terminals (specify); see below for terminal data (*), standard resistances (†), and panel mount version (‡).**

Ohms†	Net Each, Lots of		
	1-9	10-24	25-49
10 to 10K	$7.02	$6.50	$5.85
20K	8.64	8.00	7.20
50K	9.18	8.50	7.65

TRIMPOT® MODEL 260 (FIG. A, B, C)

High temperature model replaces old series 160, 265 and 266. Sealed against sand and dust; splash-proof. Power Rating: 1.0 watt. End Settings: 0-0.1% or 0-0.5 ohm, whichever is larger. Max. Operating Temperature: 175° C. Size: 5/16″ h. x 1/4″ w. x 1 1/4″ l. **Available in L, S, and P terminals (specify); see below for terminal data (*), standard resistances (†), and panel mount version (‡).**

Ohms†	Net Each, Lots of		
	1-9	10-24	25-49
10 to 10K	$5.94	$5.50	$4.95
20K	7.56	7.00	6.30
50K	8.10	7.50	6.75

MILITARY STANDARD WIRE-WOUND VARIABLE RESISTORS

TRIMR® MODEL 201 (FIG. A)

Replaces old series 132. Sealed against dust and sand; splash-proof. Power Rating: 0.25 watt. End Settings: 0-0.7%. Max. Operating Temperature: 105° C. Size: 5/16″ h. x 1/4″ w. x 1 1/4″ l. **Available in Type L terminal only; see below for terminal data (*), standard resistances (†), and panel mount version (‡).**

Ohms†	Net Each, Lots of		
	1-9	10-24	25-49
20K and 25K	$5.94	$5.50	$4.95
50K	7.56	7.00	6.30
100K	8.64	8.00	7.20

HI-R® TRIMR® MODEL 208 (FIG. D)

Replaces old series 208. High resistance unit sealed against sand, dust and splashes; available in humidity-proof model on special order. Power Rating: 2.0 watts. End Settings: 0-0.2%. Max. Operating Temperature: 175°C. Size: 13/16″ h. x 9/32″ w. x 1 1/4″ l. **Type L terminal only; see below for terminal data (*) and standard resistances (†).**

Ohms†	Net Each, Lots of		
	1-9	10-24	25-49
100K and 150K	$11.34	$10.50	$ 9.45
200K	12.96	12.00	10.80

MILITARY STANDARD CARBON POTENTIOMETERS

GENERAL PURPOSE TRIMPOT®

Carbon element units sealed against splashes, dust and sand. Power Rating: 0.2 watt. End Settings: 0-7.5%. Max. Operating Temperature: 95° C. Size: 5/16″ h. x 1/4″ w. x 1 1/4″ l. **All models available from 20K through 1 meg. resistance values; see below for standard values (†) and terminal data (*).**

Trimpot Model	Terminal*	Net Each, Lots of		
		1-9	10-24	25-49
120-15	L	$4.86	$4.50	$4.05
212	S	4.86	4.50	4.05
213	P	4.86	4.50	4.05

TRIMPOT® RESISTON* MODEL 215 (FIG. A, B, C)

New high performance model. Carbon-element unit protected from dirt, sand, dust and splashes; humidity-proof; high temp. Power Rating: 0.25 watt. End Settings: 0-1.0%. Max. Operating Temperature: 125° C. Size: 5/16″ h. x 1/4″ w. x 1 1/4″ l. **Available in L, S and P terminals; see below for terminal data (*), standard resistance values (†), and panel mount version (‡).**

Ohms†	Net Each, Lots of		
	1-9	10-24	25-49
20K to 1 meg.	$4.86	$4.50	$4.05

COMMERCIAL WIRE-WOUND TRIMIT® POTENTIOMETERS (FIG. A, B, C)

Low cost, lead screw potentiometers designed to give improved performance over single-turn units in many commercial applications. Power Rating: 0.25 watt. Maximum Operating Temperature: 85° C. Size: 5/16″ h. x 1/4″ w. x 1 1/4″ l. **All models available from 100 ohms to 10K ohms; see below for terminal data (*), standard values (†), and panel mount version (‡).**

Trimit Model	Terminal*	Net Each, Lots of		
		1-9	10-24	25-49
271	L	$1.94	$1.80	$1.62
273	S	1.94	1.80	1.62
275	P	1.94	1.80	1.62

COMMERCIAL CARBON TRIMIT® POTENTIOMETERS (FIG. A, B, C)

Same as wire-wound units, but with carbon element. Power Rating: 0.2 watt. **All models available from 20K to 1 meg. values; see below for terminal data (*), standard values (†), and panel mount version (‡).**

Trimit Model	Terminal*	Net Each, Lots of		
		1-9	10-24	25-49
272	L	$1.94	$1.80	$1.62
274	S	1.94	1.80	1.62
276	P	1.94	1.80	1.62

ORDERING INFORMATION

*TERMINAL DATA

Four terminal types are available, as specified for each individual model: **Type S,** solder lugs, flat pierced, per Fig. C. **Type L,** stranded insulated leads per Fig. A. **Type P,** printed circuit pins per Fig. B. **Type W,** solid wire per Fig. E. When ordering, add L, S, P or W to model number (example, 200S-1-100 indicates Model 200 with solder lugs and range of 10 ohms).

†RESISTANCE VALUES

Add suffix indicated to stock number for value desired.

Other resistances available on special order.

Ohms	Suffix	Ohms	Suffix	Ohms	Suffix
10	100	1000	102	100K	104
20	200	2000	202	200K	204
50	500	5000	502	500K	504
100	101	10K	103	1 meg.	105
200	201	20K	203		
500	501	50K	503		

‡PANEL MOUNT VERSION

Available only in models shown. Add suffix **M** to stock number for value desired.

Example: 200L-1-200**M.** For panel mount types, add to item price:

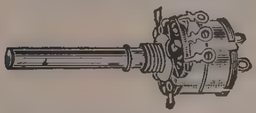
Lots of 1-9, Net Each **81c**
Lots of 10-24, Net Each **75c**
Lots of 25-49. Net Each **68c**

Specifications given in listings, above, are representative for most resistances; for complete technical information, write for individual catalog sheets on each model.

*Trademark Bourns, Inc.

Mallory Potentiometers, Controls

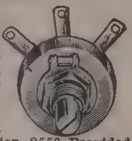
NEW PUSH-PULL VOLUME CONTROL SWITCHES



Operates as AC line switch with push-pull action on volume control. Line circuit closes when shaft is pulled out; opens when shaft is pushed in. Volume always remains at proper level because it is turned off at the volume desired; eliminates excess wear on low end of the element. Floating ring contact action is stick-free; protects against overloads. Standard carbon element; switches SPST rated at 125 volts, 3 amps. Fully assembled; mounting hardware supplied.

Mallory Number	Overall Resis.	Tap at	Taper	Net Each
PP15A	100K	......	1	$1.35
PP16A	1 Meg.	......	1	1.35
PP16L	1 Meg.	......	4	1.35
PP26A	2 Meg.	......	1	1.35
PP55T25	500K	200K	4	1.77
PP16T55	1 Meg.	500K	2	1.77
PP46T26	4 Meg.	2 Meg.	4	1.77
PP55A	500K	......	1	1.35
PP55DT1683	500K	84K-168K	4	1.77
PP55L	500K	......	4	1.35
PP55T254	500K	250K	1	1.77
PP254A	250K	......	1	1.35
PP254DT154	250K	100K-150K	4	1.77

TWO-WATT WIRE-WOUND POTENTIOMETERS

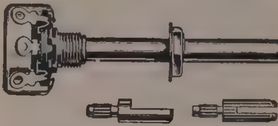


1 1/16" diameter variable resistor that will dissipate 2 watts over the entire element for continuous operation. For use in test and special instruments, bias control and bridge circuits. Linear taper only. Contact arm is grounded. Total rotation 280°; effective electrical rotation 255°. Provided with short shaft, milled screwdriver slot. Will take standard knobs. Furnished with hex. nut. Shipping Weight, 4 ozs.

POTENTIOMETERS

Mallory No.	Ohms Resis.	Carrying Capacity In Amps.	Net Each
C6P	6	.58	$1.08
C10P	10	.45	1.08
C15P	15	.37	1.08
C20P	20	.32	1.08
C30P	30	.26	1.08
C40P	40	.22	1.08
C50P	50	.2	1.08
C100P	100	.14	1.08
C200P	200	.1	1.08
C400P	400	.07	1.08
C1MP	1K	.045	1.20
C3MP	3K	.025	1.20
C5MP	5K	.02	1.47
C6MP	6K	.018	1.47
C10MP	10K	.014	1.47
C15MP	15K	.011	1.47

ROUND SHAFT MIDGETROLS®



A high quality round shaft carbon control 15/16" in dia., designed to fit all applications. Special resistance element has ample safety factor for current-carrying ability. New type contact makes control smooth and quiet. New round shaft is easily cut to any required length. Shaft is machined to exact dimensions to meet replacement requirements. Two steel shaft and knob adapters for knurled or push-on knobs and one hex nut are included. Shipping Weight, 3 oz. Net Each.................. 93c

Mall. No.	Resis. Ohms	Taper	Mall. No.	Resis. Ohms	Taper
U-1	100	4	U-35	50K	4
U-2	500	4	U-36	75K	1
U-52R	500	2	U-39	100K	1
U-751L	750	2	U-40	100K	2
U-3	1K	2	U-41	100K	4
U-4	1K	4	U-415	125K	4
U-5	1500	2	U-42	150K	1
U-5L	1500	4	U-43	200K	4
U-6	2K	4	U-44	250K	1
U-7	2500	2	U-45	250K	2
U-8	3K	4	U-46	250K	4
U-9	3K	2	U-48	500K	1
U-12	5K	1	U-50	500K	4
U-14	5K	4	U-51	750K	1
U-18	10K	1	U-52	1 Meg.	2
U-19	10K	2	U-53	1 Meg.	1
U-20	10K	4	U-54	1 Meg.	4
U-21	15K	1	U-155	1.5 Meg.	4
U-22	15K	2	U-55	2 Meg.	1
U-24	20K	1	U-56	2 Meg.	4
U-26	20K	4	U-255	2.5 Meg.	4
U-28	25K	2	U-57	3 Meg.	1
U-28A	25K	1	U-59	3 Meg.	4
U-29	25K	4	U-65	5 Meg.	1
U-33	50K	1	U-67	5 Meg.	4
U-34	50K	2	U-82	10 Meg.	4

TAPPED MIDGETROLS®

Same as above but are tapped to provide tone compensation where required. Net Each..................... $1.35

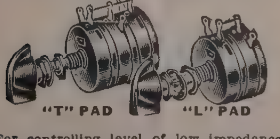
TYPE UT SINGLE TAPPED

No. UT-	Resis. Ohms	Tap At	No. UT-	Resis. Ohms	Tap At
153	15K	10K	443	1 Meg.	450K
420	250K	50K	450	2 Meg.	125K
425	350K	70K	448	2 Meg.	250K
427	500K	100K	449	2 Meg.	600K
429	500K	50K	454	2 Meg.	400K
430	500K	150K	451	2 Meg.	900K
431	500K	225K	457	3 Meg.	900K
438	1 Meg.	300K	461	3¼ Meg.	300K
440	1 Meg.	200K			

TYPE UDT DOUBLE TAPPED

Mallory No.	Overall Resistance	Tap Resistance Tap 1	Tap Resistance Tap 2
UDT-283	500K	100K	200K
UDT-289	1 meg.	250K	500K
UDT-291	1.5 meg.	225K	500K
UDT-295	2.25 meg.	250K	500K
UDT-296	2.25 meg.	500K	1 meg.
UDT-303	3.3 meg.	300K	1.5 meg.

T AND L PAD ATTENUATORS



For controlling level of low impedance audio circuits and for volume controls. May be used with audio amplifiers having peak audio rating of 15 watts. Have continuous DC dissipation rating of 4 watts. Shaft and bushing specifications are same as for "M" type controls in dual and triple unit construction. With bar knob, dial plate with matched rotation, nut and washer.

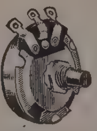
"T" Pad Attenuators— Net Each.......................... $3.09

Mallory No.	Ohms Imped.	Mallory No.	Ohms Imped.
T2	2	T200	200
T4	4	T250	250
T6	6	T500	500
T8	8	T600	600
T15	15	T1000	1000
T50	50	T2000	2000
T100	100	T3000	3000

"L" Pad Attenuators— Net Each.......................... $2.73

Mallory No.	Ohms Imped.	Mallory No.	Ohms Imped.
L2	2	L250	250
L4	4	L500	500
L6	6	L600	600
L8	8	L1000	1000
L15	15	L2000	2000
L50	50	L3000	3000
L100	100	L4000	4000
L200	200		

TYPE R WIRE-WOUND POTS

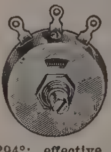


For replacement of T
controls requiring 2 w
unit. Also for V-divid
and bias application
High quality, dust-pro
1 9/16" overall dia. 900
insulation. No. 4 tap
Thumb knurled, scre
driver slotted stub sha
Bushing, 3/8".One Pal-n
with each control.

Mallory No.	Ohms	Net Each	Mallory No.	Ohms	Net Each
R2L	2	$0.93	R50CT†	50	$1.3
R3L	3	.93	R100L	100	.9
R5L	5	.93	R250L	250	.9
R6L	6	.93	R500L	500	.9
R8L	8	.93	R750L	750	.9
R10L	10	.93	R1000L	1000	.9
R10CT†	10	1.32	R1500L	1500	.9
R15L	15	.93	R2500L	2500	.9
R20L	20	.93	R3000L	3000	.9
R20CT†	20	1.32	R5000L	5000	.9
R25L	25	.93	R7500L	7500	1.0
R30L	30	.93	R10ML	10000	1.0
R30CT†	30	1.32	R15ML	15000	1.0
R50L	50	.93	R20ML	20000	1.0

†Center-tapped Controls.

FOUR-WATT WIRE-WOUND POTENTIOMETERS, RHEOSTATS



Used on bias control a
voltage dividers; also f
replacement of positio
ing, hold, focus and oth
controls of TV sets. Ru
ged. Rheostats featu
"off" position (no conn
tion) type of constru
tion. Insulated conta
arm. Pots have thr
rheostats have two
minals. Total rotati
294°; effective electrical rotation 2
±5%. **No. 4 linear taper.** Voltage bre
down 1000 v. DC. "MT" controls list
below are center-tapped and are design
for use in TV-set replacement. 1/4" d
round, knurled and slotted shaft, hollow
accept DS-36 and DS-37 Extension Sha
One control (with hex nut) to carton.

POTENTIOMETERS

Mallory Number	Ohms Resis.	Capacity in Amps.	Net Each
M1PK	1	2.00	$1.3
M3PK	3	1.15	1.3
M6PK	6	.82	1.3
M10PK	10	.63	1.3
M15PK	15	.52	1.3
M20PK	20	.45	1.3
M25PK	25	.40	1.3
M30PK	30	.37	1.3
M40PK	40	.32	1.3
M50PK	50	.28	1.3
M60PK	60	.26	1.3
M75PK	75	.23	1.3
M100PK	100	.20	1.3
M200PK	200	.14	1.3
M300PK	300	.116	1.3
M400PK	400	.10	1.3
M500PK	500	.09	1.3
M600PK	600	.082	1.3
M1MPK	1K	.063	1.3
M1.5MPK	1.5K	.052	1.3
M2MPK	2K	.045	1.3
M2.5MPK	2.5K	.04	1.3
M3MPK	3K	.037	1.3
M4MPK	4K	.032	1.3
M5MPK	5K	.028	1.3
M10MPK	10K	.02	1.3
M15MPK	15K	.016	1.4
M20MPK	20K	.014	1.4
M25MPK	25K	.013	1.4
M50MPK	50K	.009	1.7
M70MPK	70K	.0075	1.7
M75MPK	75K	.0073	2.4
M100MPK	100K	.0063	2.4

RHEOSTATS*

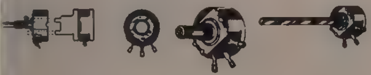
Mallory Number	Ohms Resis.	Capacity in Amps.	Net Each
M05RK	0.5	2.80	93
M1RK	1	2.00	93
M2RK	2	1.40	93
M3RK	3	1.15	93
M4RK	4	1.00	93
M6RK	6	.82	93
M10RK	10	.63	93
M15RK	15	.52	93
M20RK	20	.45	93
M25RK	25	.40	93
M30RK	30	.37	93
M40RK	40	.32	93
M50RK	50	.28	93
M60RK	60	.26	93
M75RK	75	.23	93
M100RK	100	.20	93

*"Open" or "Off" position counter-clockwi

ontrols, Control Parts, Resistors

IRC CONTROLS, PARTS

WPK AND WPS UNIVERSAL WIRE-WOUND CONTROLS



WPK: For replacement of 2, 3 and 4 watt controls. Size: .a., 45/64″ deep behind mounting face; 3″ long shaft.
Control. 2-10,000 ohms—Net Each................ $1.14
Control, 12.5K-25K ohms—Net Each............ $1.38
WPS: Same as Type WPK, but with ¾″ long shaft, slotted urled.
Control, 10-5000 ohms—Net Each................. $1.14
Control, 10-200 ohms—Net Each.............. $1.47

s	Ta-per	Controls		Ohms	Ta-per	Controls	
		No. WPK-	No. WPS-			No. WPK-	No. WPS-
	U	10	10X5*	1000	U	1000	1000
	U	....	15X7.5*	1350	U	1350	......
	U	20	20X10*	1350	R	1350R	......
	U	....	25	1500	U	1500	1500
	U	....	25X12.5*	1500	L	1500L	......
	U	30	30X15*	2000	U	2000	2000
	U	....	40	2000	L	2000L	......
	U	....	40X20*	2250	U	....	2250
	U	50	50X25*	2250	L	2250L	2250L
	U	....	60	2500	U	2500	2500
	U	....	80X40*	2500	R	2500R	......
	U	100	100X50*	3000	U	3000	3000
	U	....	140X70*	4000	U	....	4000
	U	....	150X75*	4000	L	4000L	4000L
	U	200	200X100*	5000	U	5000	5000
	U	250	250	5000	L	5000L	......
	U	300	....	6000	U	6000	......
	U	400	....	6000	L	6000L	......
	U	500	500	7500	U	7500	......
	L	....	500L	7500	L	7500L	......
	U	600	....	10K	U	10000	......
	U	650	....	12.5K	U	12500	......
	U	750	....	15K	U	15000	......
	L	750L	....	20K	U	20000	......
	R	750R	....	25K	U	25000	......

r tapped.

BASE ELEMENTS AND MULTISECTIONS

WP Base Elements: Can be assembled with parts into ird controls or used with Concentrikit for TV Concentric ontrols.
Element, 20-10.000 ohms—Net Each.............. 57c
Element, 12.5K-25K ohms—Net Each.............. 81c
d Element, 20-10,000 ohms—Net Each.............. 90c

Multi-Sections: Adds to WPK or WPS to make dual section ls. Supplied assembled but may be assembled in field by use M Kit and desired WP Base Element. Switches cannot d.
WM Multi-Section—Net Each.................. $1.14

Ta-per	Type WP		Ohms	Ta-per	Type WP	
	Base Element	Multi-Section			Base Element	Multi-Section
U	W11-010	....	750	S	W17-105X†	....
U	W11-010X*	....	1000	U	W11-108	WM-1000
U	W11-015X*	....	1350	U	W11-308	....
U	W11-020	....	1350	R	W17-308	....
U	W11-020X*	....	1500	U	W11-109	WM1500
U	W11-025	....	1500	L	W13-109	....
U	W11-025X*	....	1500	S	W17-109X‡	....
U	W11-030	....	2000	U	W11-110	WM2000
U	W11-030X*	....	2000	L	W13-110	....
U	W11-040	....	2250	U	W11-210	....
U	W11-040X*	....	2250	L	W13-210	....
U	W11-050	WM50	2500	U	W11-111	WM2500
U	W11-050X*	....	2500	R	W17-111	....
U	W11-060	....	3000	U	W11-112	WM3000
U	W11-080X*	....	3000	R	W17-112	....
U	W11-084	WM100	3300	L	W13-212	....
U	W11-084X*	....	4000	U	W11-113	....
U	W11-092X*	....	4000	L	W13-113	....
U	W11-094X*	....	5000	U	W11-114	WM5000
U	W11-100	WM200	5000	L	W13-114	....
U	W11-100X*	....	5000	R	W17-114	....
U	W11-201	WM250	6000	U	W11-214	....
U	W11-102	....	6000	L	W13-214	....
U	W11-202	....	7500	U	W11-115	....
U	W11-103	WM500	7500	L	W13-115	WM7500L
L	W13-103	....	10K	U	W11-116	WM10000
U	W11-104	....	12.5K	U	W11-217	....
U	W11-204	....	15K	U	W11-118	....
U	W11-105	....	20K	U	W11-119	....
L	W13-105	....	25K	U	W11-120	....
R	W17-105	....	....	....	....	....

er Tapped. †Tapped at 250 ohms. ‡Tapped at 500 ohms.

TAPERS FOR WPK AND WPS CONTROLS

andard linear taper.
ight hand taper for contrast and picture control.
eft hand taper for focus control.
pecial taper on specific applications.

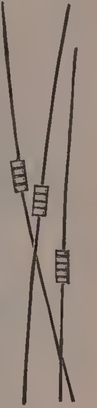
SWITCHES FOR WPK-WPS

76-11—SPST. Net..42c **Type 76-12**—DPST. Net..42c

OHMITE RESISTORS, POTENTIOMETERS

SUBMINIATURE LITTLE DEVIL®

1/10 WATT COMPOSITION RESISTORS



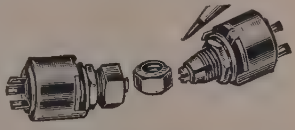
Designed especially for applications where small size is paramount—such as in miniature transistor circuit apparatus. Lead wires are molded solidly into the resistance material which insures mechanically strong construction; producing a permanent, reliable electrical contact. Lead wires are hot solder coated for easy soldering into circuits. Although unbelievably small, their reliability is as dependable as the other Ohmite line of higher rated units. Surface of the resistor is coated with an insulating material permitting operation at 200 v. DC maximum. Each unit is EIA color coded for value and tolerance. **Voltage Rating:** 150 v. rms or DC, max. continuous. **Wattage Rating:** 0.1 watt at 70° C ambient, max. continuous. **Tolerance:** ±10%. **Temperature Cycling:** Less than 3% resistance change over 5 cycles. **Size:** .067″ dia., .140″ long; leads 1″ long.

Ohmite 1/10 Watt Little Devils—
Any value. Net Each........................ 24c

STOCK VALUES

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Megs.
10	56	330	1800	10,000	56,000	0.33
12	68	390	2200	12,000	68,000	0.39
15	82	470	2700	15,000	82,000	0.47
18	100	560	3300	18,000	0.1 meg.	0.56
22	120	680	3900	22,000	0 12 meg.	0.68
27	150	820	4700	27,000	0.15 meg.	0.82
33	180	1000	5600	33,000	0.18 meg.	1.0
39	220	1200	6800	39,000	0.22 meg.	
47	270	1500	8200	47,000	0.27 meg.	

TYPE AS MOLDED COMPOSITION MINIATURE POTENTIOMETERS



The smallest of molded composition potentiometers, provides exceptional reliability. Ideal for rheostat and potentiometer applications in small or lightweight electronic assemblies. Only ½″ in diameter, control has max. continuous power rating of .5 watt at 70° C ambient. Thick molded elements provide large safety factor. Trouble-free, rivetless and solderless, connections; terminals molded directly into control elements. No metal sliding contacts; no lubricants required. An "O" ring seal plus synthetic resin fungicide assures dust-tight, waterproof and fungus-resistant unit. Rugged rotation stops will withstand torque of 4 in./lbs. Gold-plated terminals for easy soldering; locating lugs provided. **Shafts:** Screw-driver slotted, shaft locking type. Conical surface in locking nut forces collet bushing against shaft. Shaft may be reset repeatedly without damage to bushing threads. **Voltage Rating:** 350 volts max. continuous across entire element. **Wattage Rating:** 0.5 watt, entire element in circuit, at 70° C ambient. **Temperature Range:** −55° C to +120° C. **Military Specifications:** Meet 200 hour salt spray test of QQ-M-151; exceeds MIL-R-94A requirements as well as EIA requirements.

Ohmite No.	Resistance	Tolerance	Net Each
3601	100 ohms	±10%	$5.10
3602	250 ohms	±10%	5.10
3603	500 ohms	±10%	5.10
3604	1,000 ohms	±10%	5.10
3605	2,500 ohms	±10%	5.10
3606	5,000 ohms	±10%	5.10
3607	10,000 ohms	±10%	5.10
3608	25,000 ohms	±10%	5.10
3609	50,000 ohms	±10%	5.10
3610	0.1 meg.	±10%	5.10
3611	0.25 meg.	±10%	5.10
3612	0.5 meg.	±10%	5.10
3613	1.0 meg.	±20%	5.10
3614	2.5 meg.	±20%	5.10
3615	5.0 meg.	±20%	5.10

WM MULTISECTION KIT

Kit of parts which, with desired WP Base Element, will assemble WM Multisections. Instructions included.
WM Kit—Net Each.................................. 57c

WPK-WPS CONTROL PARTS

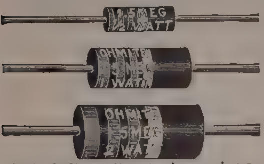
AWP—Knob Master Universal Shaft for WPK. Net Each..36c
PWP—¼″ Full Round Shaft, 3″ long, for WP. Net Each...36c
SWP—¾″ long, slotted and knurled WPS Shaft. Net Each.36c
WPB—Bushing Assembly. Net Package of 5...............36c
WPC—Cover. Net Package of 5..........................57c

PART KITS FOR WPK-WPS

Package of parts which, with addition of desired WP Base Element, will assemble WPK or WPS Controls. Includes shaft, bushing, cover and coupling plate.
SK4—For WPK. Net....57c **SK5**—For WPS. Net.....57c

OHMITE® Resistors and Kits

LITTLE DEVIL® COMPOSITION RESISTORS



Ohmite "Little Devils" are full 1/10, ¼, ½, 1 and 2-watt resistors . . . and can be used at their full wattage ratings at 70° C (158° F) ambient temperature. They dissipate heat rapidly . . . have low noise level and low voltage coefficient. ¼ to 2 w. sizes meet test requirements for the best quality characteristics of MIL-R-11B including salt water immersion and high humidity tests. They are available from stock in ¼, ½, 1 and 2 watt sizes with ±10% or ±5% tolerance; 1/10 watt, ±10% tolerance only. The standard EIA values can be furnished. In the 1 watt size ±10% tolerance values as low as 2.7 ohms are available from stock. Ratings for maximum continuous rms voltage drop are high: 150 volts for 1/10 watt units, 250 volts for ¼ watt units, 350 volts for ½ watt units, 500 volts for 1 watt units, 750 volts for 2 watt units.

STOCK RESISTORS

Figures in large, **bold type** are ±10% EIA values. All values (except those marked *) available in ±5% tolerance.

Ohms	Ohms	Ohms	Ohms	Ohms	Megs	Megs	Megs
2.7*	39	300	**2200**	16000	**0.1**	0.75	**5.6**
3.3*	43	**330**	2400	**18000**	0.11	**0.82**	6.2
3.9*	**47**	360	**2700**	20000	**0.12**	0.91	**6.8**
4.7*	51	**390**	3000	**22000**	0.13	**1.0**	7.5
5.6*	**56**	430	**3300**	24000	**0.15**	1.1	**8.2**
6.8*	62	**470**	3600	**27000**	0.16	**1.2**	9.1
8.2*	**68**	510	**3900**	30000	**0.18**	1.3	**10.0**
10	75	**560**	4300	**33000**	0.20	**1.5**	11.0
11	**82**	620	**4700**	36000	**0.22**	1.6	**12.0**
12	91	**680**	5100	**39000**	0.24	**1.8**	13.0
13	**100**	750	**5600**	43000	**0.27**	2.0	**15.0**
15	110	**820**	6200	**47000**	0.30	**2.2**	16.0
16	**120**	910	**6800**	51000	**0.33**	2.4	**18.0**
18	130	**1000**	7500	**56000**	0.36	**2.7**	20.0
20	**150**	1100	**8200**	62000	**0.39**	3.0	**22.0**
22	160	**1200**	9100	**68000**	0.43	**3.3**	......
24	**180**	1300	**10000**	75000	**0.47**	3.6	......
27	200	**1500**	11000	**82000**	0.51	**3.9**	......
30	**220**	1600	**12000**	91000	**0.56**	4.3	......
33	240	**1800**	13000	....	0.62	**4.7**	......
36	**270**	2000	**15000**	....	**0.68**	5.1	......

*1 watt size only, ±10% tolerance.

SPECIFICATIONS, PRICING

Watts	Tolerance	Size, Inches		Resistance Range	Net Each
		Lgth.	Dia.		
¼	± 5%	¼	.090	47 ohms to 22 meg.	**26c**
½	± 5%	⅜	9/64	10 ohms to 22 meg.	**24c**
1	± 5%	9/16	7/32	10 ohms to 22 meg.	**36c**
2	± 5%	11/16	5/16	10 ohms to 22 meg.	**48c**
1/10	±10%	.140	.067	10 ohms to 1.0 meg.	**24c**
¼	±10%	¼	.090	47 ohms to 22 meg.	**13c**
½	±10%	⅜	9/64	10 ohms to 22 meg.	**12c**
1	±10%	9/16	7/32	2.7 to 8.2 ohms	**36c**
1	±10%	9/16	7/32	10 ohms to 22 meg.	**18c**
2	±10%	11/16	5/16	10 ohms to 22 meg.	**24c**

LITTLE DEVIL® RESISTOR ASSORTMENTS

Three different assortments contain ratings, values and tolerances for every service and industrial need. Each assortment is packed in an attractive, lustrous gray and red solid-molded plastic cabinet, specially designed for quick, easy resistor selection. Each cabinet has five drawers, with eight compartments to each drawer. Single cabinets are 9" long, 4¾" high, and 5¼" deep. Service assortments use one cabinet, ±10%. Resistance and wattage marked on every Little Devil resistor.

RADIO SERVICE ASSORTMENTS

±10% Tolerance, 40 Resistance Values	Net Each
Ohmite No. CAB-2—Contains 125 1 watt resistors......	**$22.50**
Ohmite No. CAB-3—Contains 125 2 watt resistors......	**30.00**
Ohmite No. CAB-10—Contains 150 ½ watt resistors....	**18.00**

WE CARRY A COMPLETE INVENTORY OF RADIO, TELEVISION AND SPECIAL PURPOSE RESISTORS. DO NOT HESITATE TO INQUIRE ABOUT UNLISTED OR NEW TYPES.

BROWN DEVIL® FIXED RESISTORS

Wire-wound vitreous e eled units which may be veniently mounted by tinned wire leads. The reous coating provides best protection against midity, fumes and mecha damage. Single-layer wind keeps wire temperature Provided with 1½" th leads. Size: 5 watt, 1" x 5/16"; 10 watt, 1¾" x 5/16"; 20 watt, 2" x

Ohms	5 Watt Size Net	10 Watt Size Net	20 Watt Size Net	Ohms	5 Watt Size Net	10 Watt Size Net	20 W
0.5	....	$0.48	$0.63	2,250	$0.48	$0.54	$0.
1	.45	.48	.63	2,500	.48	.54	
1.5	.45	.48	....	2,750	....	....	
2	.45	.48	.63	3,000	.48	.54	
3	.45	.48	.63	3,500	.48	.54	
4	.45	.48	.63	4,000	.48	.54	
5	.45	.48	.63	4,500	.48	.54	
7.5	.45	.48	....	5,000	.48	.54	
10	.45	.48	.63	6,000	.51	.60	
12	.45	.48	....	7,000	.51	.60	
15	.45	.48	....	7,500	.51	.60	
20	.45	.48	....	8,000	.51	.60	
25	.45	.48	.63	8,500	....	.60	...
30	.45	.48	....	9,000	.51	.60	
35	.45	.48	....	10,000	.51	.60	
40	.45	.48	....	11,000	....	.66	...
50	.45	.48	.63	12,000	....	.66	...
75	.45	.48	.63	12,500	.54	.66	
100	.45	.48	.63	13,500	....	.66	...
125	.45	.48	....	15,000	.54	.66	
150	.45	.48	.63	16,000	....	.66	...
200	.45	.48	.63	17,500	.57	.66	...
225	.45	.48	....	18,000	....	.66	...
250	.45	.48	.63	20,000	.57	.66	...
300	.45	.48	.63	22,500	.60	.72	...
350	.45	.48	.63	25,000	.60	.72	
400	.45	.48	.63	30,000	....	.81	
450	.45	.48	....	35,000	....	.81	
500	.45	.48	.63	40,000	....	.81	
600	.45	.48	....	45,000	....	.81	
650	....	....	.63	50,000	....	.81	
700	.45	.48	.63	55,000	....	....	
750	.45	.48	.63	60,000	....	....	
800	.45	.48	.63	65,000	....	....	
900	.45	.48	.63	70,000	....	....	
1,000	.45	.48	.63	75,000	....	....	
1,100	.48	.54	....	80,000	....	....	
1,200	.48	.54	.66	85,000	....	....	
1,250	.48	.54	.66	90,000	....	....	
1,500	.48	.54	.66	95,000	....	....	
1,750	.48	.54	.66	100,000	....	....	
2,000	.48	.54	.66				

AXIAL-LEAD RESISTORS

Compact, wire-wound for tough jobs. Steatite core. **Tolerance:** ±5%, 1 ohm and up; ±10% below 1 ohm. Tinned leads 1½" S 3 Watt, 9/16" x ¼" dia.; 5 Watt, 1 1/16" x 11/32" dia.; 10 Watt, 1 15/ 13/32" dia.

Ohms	3 Watt Size Net	5 Watt Size Net	10 Watt Size Net	Ohms	3 Watt Size Net	5 Watt Size Net	10 W
1	$0.51	$0.54	$0.60	1,200	$0.54	$0.57	$0.
1.5	.51	.54	.60	1,250	.54	.57	
2	.51	.54	.60	1,500	.54	.57	
3	.51	.54	.60	1,750	.54	.57	
4	.51	.54	.60	2,000	.54	.57	
5	.51	.54	.60	2,250	.54	.57	
7.5	.51	.54	.60	2,500	.54	.57	
10	.51	.54	.60	3,000	.54	.57	
12	.51	.54	.60	3,500	.54	.57	
15	.51	.54	.60	4,000	.54	.57	
20	.51	.54	.60	4,500	.54	.57	
25	.51	.54	.60	5,000	.54	.57	
30	.51	.54	.60	6,000	.57	.60	
35	.51	.54	.60	7,000	.57	.60	
40	.51	.54	.60	7,500	.57	.60	
50	.51	.54	.60	8,000	.57	.60	
75	.51	.54	.60	8,500	....	....	
100	.51	.54	.60	9,000	.57	.60	
125	.51	.54	.60	10,000	.57	.60	
150	.51	.54	.60	11,000	....	....	
200	.51	.54	.60	12,000	....	....	
225	.51	.54	.60	12,500	....	.72	
250	.51	.54	.60	13,500	....	....	
300	.51	.54	.60	15,000	....	.72	
350	.51	.54	.60	16,000	....	....	
400	.51	.54	.60	17,500	....	.72	
450	.51	.54	.60	18,000	....	.72	
500	.51	.54	.60	20,000	....	.72	
600	.51	.54	.60	22,500	....	.75	
700	.51	.54	.60	25,000	....	.75	
750	.51	.54	.60	30,000	....	....	
800	.51	.54	.60	35,000	....	....	
900	.51	.54	.60	40,000	....	....	
1,000	.51	.54	.60	45,000	....	....	
1,100	.54	.57	.63	50,000	....	....	

HMITE® Dividohm, Fixed Resistors

DOHM® VITREOUS ENAMELED RESISTORS

“Dividohm” resistors are vitreous enameled or ceramic cores with a narrow strip of the wire turns forming a contact surface for the embossed contact of the adjustable lug. A patented percentage of resistance scale stamped on the units, easy to set the lugs at the desired value. 1 screwdriver ig supplied. **10 Watt Size**—Core: 1¾″ x 5/16″. With No. 5 . Mounting centers, 2¼″. **25 Watt Size**—Core: 2″ x 9/16″. . 9 brackets. Mounting centers 2¾″. **50 Watt Size**—Core: . With No. 9 brackets. Mounting centers 4¾″. **75 Watt** ore: 6″ x 9/16″. With No. 9 brackets. Mounting centers, **0 Watt Size**—Core: 6½″ x ¾″. With No. 12 brackets. g centers, 7⅜″. **160 Watt Size**—Core: 8½″ x 1⅛″. With brackets. Mounting centers, 9⅜″. **200 Watt Size**—Core: 1⅛″. With No. 18 brackets. Mounting centers, 11⅜″.

10 WATT DIVIDOHMS

Ohms	Net Each	Ohmite No.	Ohms	Net Each	Ohmite No.	Ohms	Net Each
1	$0.96	1015	250	$0.96	1029	3000	$1.02
2	.96	1016	300	.96	1030	3500	1.02
3	.96	1017	350	.96	1031	4000	1.02
5	.96	1018	400	.96	1032	4500	1.02
7.5	.96	1019	500	.96	1033	5000	1.02
10	.96	1020	600	.96	1034	6000	1.08
15	.96	1021	750	.96	1035	7000	1.08
20	.96	1022	800	.96	1036	7500	1.08
25	.96	1023	1000	.96	1037	8000	1.08
50	.96	1024	1250	1.02	1038	8500	1.08
75	.96	1025	1500	1.02	1039	9000	1.08
100	.96	1026	2000	1.02	1040	10K	1.08
150	.96	1027	2250	1.02	....	....	.....
200	.96	1028	2500	1.02	....	....	.....

5 WATT DIVIDOHMS AND FIXED RESISTORS

Dividohm		Fixed		Ohms	Dividohm		Fixed	
No.	Net	No.	Net		No.	Net	No.	Net
60	$1.23	0200J	$0.66	2250	0377B	$1.26	.....	.....
60B	1.23	0220K	.66	2500	0378	1.26	0208	$0.69
61	1.23	0200L	.66	3000	0379	1.26	0209	.69
.....	.....	0200N	.66	3500	0380	1.26	0210	.69
62	1.23	0200A	.66	4000	0381	1.26	0211	.69
62B	1.23	.....	.....	4500	0381B	1.26	.....	.....
63	1.23	0200B	.66	5000	0382	1.26	0212	.69
64	1.23	0200R	.66	6000	0383	1.32	0213	.75
64B	1.23	.....	.....	7000	0383B	1.32	.....	.....
65	1.23	0200C	.66	7500	0384	1.32	0214	.75
66	1.23	0200D	.66	8000	0384B	1.32	.....	.....
67	1.23	0200E	.66	9000	0384C	1.32	.....	.....
68	1.23	0200F	.66	10K	0385	1.32	0215	.75
69	1.23	0200G	.66	12K	0386	1.38	0216	.78
70	1.23	0200H	.66	15K	0387	1.38	0217	.78
71	1.23	0201	.66	20K	0388	1.38	0218	.78
371B	1.23	.....	.....	25K	0389	1.50	0219	.90
371C	1.23	.....	.....	30K	....	.....	0220	.90
372	1.23	0202	.66	35K	....	.....	0221	.90
373	1.23	0203	.66	40K	....	.....	0222	.90
374	1.23	0204	.66	50K	....	.....	0224	1.02
375	1.23	0205	.66	60K	....	.....	0225	1.02
375B	1.26	.....	.....	70K	....	.....	0226	1.20
376	1.26	0206	.69	80K	....	.....	0227	1.20
377	1.26	0207	.69	100K	....	.....	0229	1.38

O WATT DIVIDOHMS AND FIXED RESISTORS

Dividohm		Fixed		Ohms	Dividohm		Fixed	
No.	Net	No.	Net		No.	Net	No.	Net
560A	$1.98	0400J	$1.50	4000	0577	$1.62	0410	$1.14
560B	1.56	0400K	1.08	4500	0577B	1.62	.....	.....
560C	1.56	0400L	1.08	5000	0578	1.62	0411	1.14
560D	1.56	0400N	1.08	6000	0578B	1.74	.....	.....
560	1.56	0400A	1.08	7000	0578C	1.74	.....	.....
561	1.56	0400B	1.08	7500	0579	1.74	0412	1.26
562	1.56	0400C	1.08	8000	0580	1.74	0413	1.26
563	1.56	0400D	1.08	9000	0580B	1.74	.....	.....
564	1.56	0400E	1.08	10K	0581	1.74	0414	1.26
565	1.56	0400F	1.08	12K	0582	1.86	0415	1.38
566	1.56	0400G	1.08	15K	0583	1.86	0416	1.38
567	1.56	0400H	1.08	20K	0584	1.86	0417	1.38
568	1.56	0401	1.08	25K	0585	2.04	0418	1.53
568B	1.56	.....	.....	30K	0586	2.04	.....	.....
568C	1.56	.....	.....	35K	....	.....	0419	1.53
569	1.56	0402	1.08	40K	0587	2.04	.....	.....
570	1.56	0403	1.08	50K	0588	2.16	0420	1.71
571	1.56	0404	1.08	60K	0589	2.16	.....	.....
572	1.56	0405	1.08	75K	....	.....	0421	1.92
572B	1.62	.....	.....	80K	0590	2.43	.....	.....
573	1.62	0406	1.14	100K	0591	2.58	0422	2.10
574	1.62	0407	1.14	125K	....	.....	0423	2.22
574B	1.62	.....	.....	150K	....	.....	0424	2.31
575	1.62	0408	1.14	175K	....	.....	0425	2.40
576	1.62	0409	1.14	200K	....	.....	0426	2.49
576B	1.62	.....	.....	250K	....	.....	0428	2.79

DJUSTABLE LUGS, SILVER CONTACT BUTTONS

am. es	Screwdriver Type		Bakelite Knob Type	
	Ohmite No.	Net Each	Ohmite No.	Net Each
	2161	24c	....	....
	2164	24c	2165	30c
	2166	30c	2167	42c
	2170	30c	2171	42c

VITREOUS ENAMELED FIXED RESISTORS

Lug type, wire-wound on ceramic cores. Wattage ratings are for use in free air. **25 Watt Size**—For resistance values to 10,000 ohms. Core: 2″ x 9/16″. With No. 9 brackets. Mounting centers, 2¾″. **50 Watt Size**—For resistance values up to 25,000 ohms. Core: 4″ x 9/16″. With No. 9 brackets. Mounting centers, 4¾″. **100 Watt Size**—For resistance values to 60,000 ohms. Core: 6½″ x ¾″. With No. 12 brackets. Mounting centers, 7⅜″. **160 Watt Size** –For resistance values to 100,000 ohms. Core: 8½″ x 1⅛″. With No. 18 brackets. Mounting centers, 9⅜″. **200 Watt Size**—For resistance values to 100,000 ohms. Core: 10½″ x 1⅛″. Mounting centers, 11⅜″.

75 WATT DIVIDOHMS

Ohmite No.	Ohms	Net Each	Ohmite No.	Ohms	Net Each	Ohmite No.	Ohms	Net Each
0769A	1	$2.34	0777B	800	$1.80	0784C	9000	$1.98
0769B	2	2.34	0778	1000	1.80	0785	10K	1.98
0769C	3	1.80	0778B	1250	1.86	0785B	12K	2.10
0769D	4	1.80	0779	1500	1.86	0786	15K	2.10
0769	5	1.80	0780	2000	1.86	0787	20K	2.10
0770	10	1.80	0780B	2250	1.86	0788	25K	2.34
0771	15	1.80	0781	2500	1.86	0789	30K	2.34
0772	25	1.80	0781B	3000	1.86	0790	35K	2.34
0773	50	1.80	0782	3500	1.86	0791	40K	2.34
0774	100	1.80	0782B	4000	1.86	0792	45K	2.40
0774B	200	1.80	0782C	4500	1.86	0793	50K	2.40
0775	250	1.80	0783	5000	1.86	0794	60K	2.40
0775B	300	1.80	0783B	6000	1.98	0795	80K	2.64
0775C	400	1.80	0783C	7000	1.98	0796	100K	2.85
0776	500	1.80	0784	7500	1.98	....	....	.....
0777	750	1.80	0784B	8000	1.98	....	....	.....

100 WATT DIVIDOHMS AND FIXED RESISTORS

Ohms	Dividohm		Fixed		Ohms	Dividohm		Fixed	
	No.	Net	No.	Net		No.	Net	No.	Net
1	0956A	$3.00	0600C	$2.22	1500	0962B	$2.43	0610	$1.68
2	0956B	3.00	0600D	2.22	2000	....	.....	0611	1.68
3	0956C	3.00	0600E	2.22	2500	0963	2.43	0612	1.68
4	0956D	2.37	0600F	1.59	3000	....	.....	0613	1.68
5	0956	2.37	0600A	1.59	5000	0964	2.43	0614	1.68
10	0957	2.37	0600B	1.59	7500	....	.....	0615	1.80
25	0958	2.37	0601	1.59	10K	0965	2.55	0616	1.80
50	0959	2.37	0602	1.59	15K	0966	2.70	0617	1.98
75	....	.....	0603	1.59	20K	0967	2.70	0618	1.98
100	0960	2.37	0604	1.59	25K	0968	2.88	0619	2.10
125	....	.....	0604B	1.59	30K	0969	2.88	0620	2.10
150	....	.....	0605	1.59	40K	0970	2.88	0621	2.10
250	0960B	2.37	0606	1.59	50K	0971	3.00	0622	2.22
500	0961	2.37	0607	1.59	60K	....	.....	0623	2.22
750	....	.....	0608	1.59	75K	0972	3.12	0624	2.37
1000	0962	2.37	0609	1.59	100K	0973	3.27	0625	2.52

160 WATT DIVIDOHMS AND FIXED RESISTORS

Ohms	Dividohm		Fixed		Ohms	Dividohm		Fixed	
	No.	Net	No.	Net		No.	Net	No.	Net
1	1156A	$3.51	0700C	$2.76	1500	1162B	$2.76	0710	$2.01
2	1156B	3.51	0700D	2.76	2000	....	.....	0711	2.01
3	1156C	3.51	0700E	2.76	2500	1163	2.76	0712	2.01
4	1156D	3.51	0700F	2.76	3000	....	.....	0713	2.01
5	1156	3.51	0700A	2.76	5000	1164	2.76	0714	2.01
10	1157	2.73	0700B	1.98	7500	....	.....	0715	2.16
25	1158	2.73	0701	1.98	10K	1165	2.94	0716	2.16
50	1159	2.73	0702	1.98	15K	1166	3.09	0717	2.34
75	....	.....	0703	1.98	20K	1167	3.09	0718	2.34
100	1160	2.73	0704	1.98	25K	1168	3.18	0719	2.40
125	....	.....	0704B	1.98	30K	1169	3.18	0720	2.40
150	....	.....	0705	1.98	40K	1170	3.18	0721	2.40
250	1160B	2.73	0706	1.98	50K	1171	3.24	0722	2.49
500	1161	2.73	0707	1.98	60K	....	.....	0723	2.49
750	....	.....	0708	1.98	75K	1172	3.42	0724	2.64
1000	1162	2.73	0709	1.98	100K	1173	3.60	0725	2.82

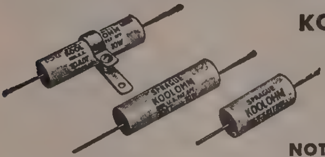
200 WATT DIVIDOHMS AND FIXED RESISTORS

Ohms	Dividohm		Fixed		Ohms	Dividohm		Fixed	
	No.	Net	No.	Net		No.	Net	No.	Net
1	1356A	$3.75	0900C	$3.00	2000	....	.....	0911	$2.16
2	1356B	3.75	0900D	3.00	2500	1363	$2.94	0912	2.16
3	1356C	3.75	0900E	3.00	3000	....	.....	0913	2.16
4	1356D	3.75	0900F	3.00	5000	1364	2.94	0914	2.16
5	1356	3.75	0900A	3.00	7500	....	.....	0915	2.34
10	1357	2.88	0900B	2.13	10K	1365	3.12	0916	2.34
25	1358	2.88	0901	2.13	15K	1366	3.24	0917	2.49
50	1359	2.88	0902	2.13	20K	1367	3.24	0918	2.49
75	....	.....	0903	2.13	25K	1368	3.30	0919	2.58
100	1360	2.88	0904	2.13	30K	1369	3.30	0920	2.58
150	....	.....	0905	2.13	40K	1370	3.30	0921	2.58
250	1360B	2.88	0906	2.13	50K	1371	3.42	0922	2.64
500	1361	2.88	0907	2.13	60K	....	.....	0923	2.64
750	....	.....	0908	2.13	75K	1372	3.57	0924	2.82
1000	1362	2.88	0909	2.13	100K	1373	3.75	0925	3.00
1500	1362B	2.94	0910	2.16	.....	....	.....	.....	.....

STANDARD ADJUSTABLE LUGS

Core Diam. Inches	Screwdriver Type		Bakelite Knob Type	
	Ohmite No.	Net Each	Ohmite No.	Net Each
5/16	1058	18c	....	....
9/16	0358	18c	0359	24c
¾	1958	27c	1959	30c
1⅛	2158	27c	2159	30c

SPRAGUE Wire-Wound Resistors



KOOLOHM® WIRE-WOUND RESISTORS

● Wound with wire which is insulated **before winding** with a flexible ceramic coating. Coating is impervious to heat up to 1000° C. ● "Tropicalized" by glazed ceramic coating and new type end seals. ● May be mounted anywhere—even flat against chassis o grounded parts. ● Extremely high insulation resistance—10,000 volts from surface o ceramic jacket to inner resistance elements. ● Insulated wire permits winding i layers, which means smaller physical sizes for each wattage rating.

NOTE: NIT TYPES ARE NON-INDUCTIVE

5 WATTS

TYPES 5KT & 5NIT

15/32" dia. x 1 7/32" long

5KT Net	Ohms	5NIT Net
$0.39	5	$0.60
.39	10	.60
.39	15	.60
.39	20	.60
.39	25	.60
.39	30	.60
.39	40	.60
.39	50	.60
.39	75	.60
.39	100	.60
.39	150	.60
.39	200	.60
.39	250	.60
.39	300	.60
.39	400	.60
.39	500	.60
.39	600	.60
.39	700	.60
.39	800	.60
.39	900	.60
.39	1000	.60
.42	1250	.69
.42	1500	.69
.42	1750	.69
.42	2000	.69
.42	2500	.75
.42	3000	.75
.42	4000	.75
.42	5000	.78
.48	6000	*
.48	7000	*
.48	7500	*
.48	8000	*
.48	9000	*
.48	10,000	*
.54	12,500	*
.54	14,000	*
.57	15,000	*
.57	20,000	*
.66	25,000	*
.72	30,000	*
.84	35,000	*
.90	40,000	*

10 WATTS

TYPES 10KT & 10NIT

15/32" dia. x 1 27/32" long

10KT Net	Ohms	10NIT Net
$0.45	5	$0.60
.45	10	.60
.45	15	.60
.45	20	.60
.45	25	.60
.45	30	.60
.45	40	.60
.45	50	.60
.45	75	.60
.45	100	.60
.45	150	.60
.45	200	.60
.45	250	.60
.45	300	.60
.45	400	.60
.45	500	.60
.45	600	.60
.45	700	.60
.45	750	.60
.45	800	.60
.45	900	.60
.45	1000	.60
.48	1250	.69
.48	1500	.69
.48	1750	.69
.48	2000	.69
.48	2500	.75
.48	3000	.75
.48	4000	.75
.48	5000	.78
.54	6000	.78
.54	7500	.87
.54	8000	.87
.54	9000	.87
.54	10,000	1.14
.60	12,000	*
.60	14,000	*
.60	15,000	*
.60	17,500	*
.66	20,000	*
.72	25,000	*
.78	30,000	*
.90	35,000	*
.99	40,000	*
1.08	50,000	*
1.20	60,000	*
1.32	70,000	*

10 WATTS ADJUSTABLE†

TYPE 10-AD

15/32" dia. x 1 29/32" long

Ohms	Net
10	$0.87
25	.87
50	.87
100	.87
150	.87
200	.87
250	.87
300	.87
400	.87
500	.87
750	.87
1000	.87
1500	.93
2000	.93
2500	.93
3000	.93
4000	.93
5000	.93
7500	.99
10,000	.99

Extra Bands **6c**

25 WATTS

TYPES 25KT & 25NIT

23/32" dia. x 2 7/8" long

25KT Net	Ohms	25NIT Net
$0.87	5	$1.11
.78	10	1.11
.78	25	1.11
.78	50	1.11
.78	75	1.11
.78	100	1.11
.78	150	1.11
.78	200	1.11
.78	250	1.11
.78	500	1.11
.81	600	1.11
.81	750	1.11
.81	1000	1.11
.81	1500	1.20
$0.81	2000	$1.20
.81	2500	1.20
.87	3000	1.44
.87	4000	1.44
.87	5000	1.44
.87	7500	1.44
.90	10,000	1.65
.93	12,000	1.65
.93	15,000	1.65
.99	20,000	1.86
1.08	25,000	2.04
1.20	40,000	*
1.32	50,000	*
1.71	75,000	*
2.13	100,000	*

50 WATTS

TYPES 50KT & 50NIT

7/8" dia. x 4" long

50KT Net	Ohms	50NIT Net
$1.17	5	$1.86
1.17	10	1.86
1.17	25	1.86
1.17	50	1.86
1.17	75	1.86
1.17	100	1.86
1.17	150	1.86
1.17	200	1.86
1.17	250	1.86
1.17	500	1.86
1.17	600	1.86
1.17	750	1.86
1.17	1000	1.86
1.26	1500	1.86
1.26	2000	1.86
1.26	2500	1.86
1.38	3000	1.86
1.38	4000	1.86
1.38	5000	1.86
1.44	7500	1.86
1.71	10,000	1.86
1.71	12,000	1.86
1.71	15,000	1.86
1.74	20,000	1.98
$1.74	25,000	$1.98
1.80	50,000	3.46
1.86	75,000	*
2.10	100,000	*

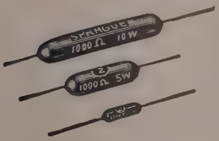
120 WATTS

TYPES 120KT & 120NIT

1 1/16" dia. x 8 15/16" long

120KT Net	Ohms	120NIT Net
$4.65	5	$5.64
4.65	10	5.64
4.65	25	5.64
4.65	50	5.64
4.65	75	5.64
4.65	100	5.64
4.65	150	5.64
4.65	200	5.64
4.65	250	5.64
**	390	5.64
4.65	500	5.64
4.65	600	5.64
4.65	750	5.64
4.65	1000	5.64
4.65	1500	5.64
4.65	2000	5.64
4.65	2500	5.64
4.65	3000	5.64
4.65	5000	5.64
4.80	7500	6.00
4.80	10,000	6.00
4.80	15,000	6.00
4.80	20,000	6.00
4.80	25,000	6.00
4.80	50,000	6.00
4.80	75,000	*
4.80	100,000	*

*KT types only. †Not Tropicalized. **NIT type only.



BLUE JACKET® WIRE-WOUND RESISTORS

Dependable in critical equipment, yet low priced for radio-TV service work. Ideal for point-to-poi terminal board, and printed chassis wiring. Axial design provides secure, vibration-proof mountin Satisfies MIL specification performance requirements with 35% to 50% size reduction. Crazeproo humidity-proof, corrosion-proof enamel coating prevents failure from electrolysis. Ceramic winding co and coating enamel withstand rapid thermal changes. Hot spot rating: 300° C rise above 40° C ambien temperature. Tolerance: to 50 ohms, ± 10%; over 50 ohms, ± 5%.

TYPE 151E 3 WATTS

15/64" d. x 9/16" l.

Ohms	Net
10	$0.51
12	.51
15	.51
18	.51
22	.51
27	.51
33	.51
39	.51
47	.51
50	.51
56	.51
68	.51
82	.51
100	.51
120	.51
150	.51
180	$0.51
200	.51
220	.51
250	.51
270	.51
300	.51
330	.51
390	.51
470	.51
500	.51
560	.51
680	.51
820	.51
1000	.51
1200	.51
1500	.51
1800	.51
2000	.51
2200	.51
2500	.51
2700	$0.51
3300	.51
3900	.51
4700	.51
5000	.57
5600	.57
6800	.57
8200	.57
10,000	.57

TYPE 27E 5 WATTS

11/32" d. x 1 3/16" l.

Ohms	Net
1	$0.54
1.[illegible]	.54
2	.54
3	.54
4	.54
5	.54
7.5	.54
10	.54
12	.54
15	$0.54
20	.54
25	.54
30	.54
35	.54
40	.54
50	.54
75	.54
100	.54
125	.54
150	.54
200	.54
225	.54
250	.54
300	.54
350	.54
400	.54
450	.54
500	.54
600	.54
700	.54
750	.54
800	.54
900	.54
1000	.54
1100	.57
1200	$0.57
1250	.57
1500	.57
1750	.57
2000	.57
2250	.57
2500	.57
3000	.57
3500	.57
4000	.57
4500	.57
5000	.57
6000	.63
7000	.63
7500	.63
8000	.63
9000	.63
10,000	.63
12,000	.84
14,000	.84
15,000	.84
17,500	.84
20,000	.84
22,500	.87
25,000	.87
30,000	.87

TYPE 28E 10 WATTS

11/32" d. x 1 15/16" l.

Ohms	Net
1	$0.60
1.5	.60
2	.60
3	.60
4	.60
5	.60
7.5	.60
10	.60
12	.60
15	.60
20	.60
25	.60
30	.60
35	.60
40	.60
50	.60
75	.60
100	.60
125	.60
150	.60
200	.60
225	.60
250	$0.60
300	.60
350	.60
400	.60
450	.60
500	.60
600	.60
700	.60
750	.60
800	.60
900	.60
1000	.60
1100	.63
1200	.63
1250	.63
1450	.63
1500	.63
1750	.63
2000	.63
2250	.63
2500	.63
3000	.63
3300	.63
3500	.63
3900	.63
4000	.63
4500	$0.6
5000	.6
6000	.7
7000	.7
7500	.7
8000	.7
8500	.7
9000	.7
10,000	.7
11,000	.8
12,000	.8
12,500	.8
13,500	.8
14,300	.8
15,000	.8
16,000	.8
17,500	.8
18,000	.8
20,000	.8
22,500	.9
25,000	.9
30,000	.9
35,000	.9
40,000	.9
45,000	1.0
50,000	1.0

esistors, Paper Capacitors

IRC CARBON AND WIRE-WOUND RESISTORS

BTS
BTA
BT-2
BW-½
BW-1
BW-2

CARBON RESISTORS

IRC Type	Watt	Range of Values	Size, Inches	5% Tolerance Net Each, Lots of 1-99	5% Tolerance Net Each, Lots of 100-249	10% Tolerance Net Each, Lots of 1-99	10% Tolerance Net Each, Lots of 100-249
BTR	¼	10 ohms-22 megs	13/32 x 3/32	**24c**	**14.4c**	**12c**	**7.2c**
BTS	½	10 ohms-22 megs	13/32 x ⅛	**24c**	**14.4c**	**12c**	**7.2c**
BTA	1	10 ohms-22 megs	13/32 x ¼	**36c**	**21.6c**	**18c**	**10.8c**
BTB	2	100 ohms-22 megs	1¼ x ¼	**48c**	**28.8c**	**24c**	**14.4c**

WIRE-WOUND RESISTORS

IRC Type	Watt	Range of Values	Size, Inches	5% Tolerance Net Each, Lots of 1-99	5% Tolerance Net Each, Lots of 100-249	10% Tolerance Net Each, Lots of 1-99	10% Tolerance Net Each, Lots of 100-249
BW-½	½	0.24-9.1 ohms	⅝ x 3/16	**48c**	**28.8c**	**24c**	**14.4c**
BW-½	½	10-820 ohms	⅝ x 3/16	**30c**	**18c**	**20c**	**12c**
BW-1	1	0.47-5100 ohms	1¼ x ¼	**45c**	**27c**	**30c**	**18c**
BW-2	2	1.0-8200 ohms	1¾ x 21/64	**60c**	**36c**	**40c**	**24c**

tolerance available only in values printed in bold type:
5% available in all values.

BT insulated carbon resistors are etely insulated with bakelite and un-ed for stability, low noise level, low e coefficient and mechanical strength. tion breakdown of Type BTS is 750 to ground; all other Type BT's 1000 Standard tolerance ±10%. ±5% at cost.

BW insulated wire-wound resistors entical with Type BT except that nce element is close wound around l insulated core. Tolerance ±10%. available at higher cost.

trial Quantities—In boxes of 100 of n value. May be assorted in 5 values a.) in 500 lot orders; 10 values in ot orders. ±10% Tolerance.

RESISTANCE CHART

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Megs	Megs
0.24	1.6	11	75	510	3,600	24K	160K	**1.0**	**6.8**
0.27	**1.8**	**12**	**82**	**560**	**3,900**	**27K**	**180K**	1.1	7.5
0.30	2.0	13	91	620	4,300	30K	200K	**1.2**	**8.2**
0.33	**2.2**	**15**	**100**	**680**	**4,700**	**33K**	**220K**	1.3	9.1
0.36	2.4	16	110	750	5,100	36K	240K	**1.5**	**10**
0.39	**2.7**	**18**	**120**	**820**	**5,600**	**39K**	**270K**	1.6	11
0.43	3.0	20	130	910	6,200	43K	300K	**1.8**	**12**
0.47	**3.3**	**22**	**150**	**1,000**	**6,800**	**47K**	**330K**	2.0	13
0.51	3.6	24	160	1,100	7,500	51K	360K	**2.2**	**15**
0.56	**3.9**	**27**	**180**	**1,200**	**8,200**	**56K**	**390K**	2.4	16
0.62	4.3	30	200	1,300	9,100	62K	430K	**2.7**	**18**
0.68	**4.7**	**33**	**220**	**1,500**	**10K**	**68K**	**470K**	3.0	20
0.75	5.1	36	240	1,600	11K	75K	510K	**3.3**	**22**
0.82	**5.6**	**39**	**270**	**1,800**	**12K**	**82K**	**560K**	3.6	....
0.91	6.2	43	300	2,000	13K	91K	620K	**3.9**	....
1.0	**6.8**	**47**	**330**	**2,200**	**15K**	**100K**	**680K**	4.3	....
1.1	7.5	51	360	2,400	16K	110K	750K	**4.7**	....
1.2	**8.2**	**56**	**390**	**2,700**	**18K**	**120K**	**820K**	5.1	....
1.3	9.1	62	430	3,000	20K	130K	910K	**5.6**	....
1.5	**10**	**68**	**470**	**3,300**	**22K**	**150K**	....	6.2	....

AEROVOX CARBOFILM RESISTORS

Tolerance: ±1%

AEROVOX CARBOFILM

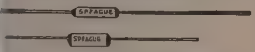
Made under licensed agreement with Western Electric, these precision resistors are the ultimate in extreme accuracy and stability. Carbofilm resistors are ed for circuits calling for the accuracy and stability of wire- resistors with the marked economy of carbon resistors. serve a real need in test equipment in laboratory instru-

Type CPS—½ **watt.** 0.162″ D. x 19/32″ long. 7.5 to 40 ohms.	**$0.60**
43 ohms to 2 megohms. Net Each......................	**.39**
Type CP—½ **watt.** 0.230″ D. x 11/16″ L. 3 to 40 ohms. Net	**.60**
43 ohms to 5 megohms. Net Each......................	**.39**
Type CPL—½ **watt.** 0.230″ D. x 15/16″ L. 5.1 to 7.5 meg. Net	**.45**
Type CP-1—1 **watt.** 0.293″ D. x 15/16″ L. 10 to 15 ohms. Net	**1.08**
16 to 40 ohms, Net **$0.69;** 43 ohms to 1 meg., Net Ea..	**.57**
1.1 to 5 megohms, Net **$0.60;** 5.1 to 15 megohms, Net.	**.66**
Type CP-2—2 **watt.** 0.293″ D. x 2 1/16″ L. 50 to 99.5 ohms.	**1.08**
100 ohms to 10 megs., Net **$0.72;** 12 to 20 megohms, Net	**.78**
22 to 30 megohms, Net **$1.05;** 33 to 50 megohms, Net.	**1.20**
100 megohms, tolerance, ±2% only. Net Each..........	**3.00**

Values Shown Below Are In Ohms													Megohms		
7.5	22.0	51	99.5	350	800	2250	5500	10K	33K	75K	225K	600K	1.6	5.0	12.5
8.0	22.5	55	100	360	820	2400	5600	11K	35K	80K	240K	620K	1.8	5.1	13.0
8.2	24.0	56	110	390	850	2500	5950	12K	36K	82K	250K	650K	2.0	5.5	15.0
8.5	25.0	59.5	120	400	900	2700	6000	12.5K	39K	85K	270K	680K	2.2	5.6	16.0
9.0	27.0	60	130	430	910	2950	6200	13K	40K	90K	300K	700K	2.225	6.0	18.0
9.1	29.5	62	150	450	1000	3000	6500	13.5K	43K	91K	330K	750K	2.4	6.2	20.0
10.0	30	65	160	470	1100	3300	6800	15K	45K	100K	350K	800K	2.5	6.5	22.0
11.0	33	68	175	500	1200	3500	7000	16K	47K	110K	360K	820K	2.7	6.8	25.0
12.0	35	70	180	510	1250	3600	7450	17.5K	50K	120K	390K	850K	3.0	7.0	27.0
12.5	36	74.5	200	550	1300	3900	7500	18K	51K	125K	400K	900K	3.3	7.5	30.0
13.0	39	75	220	560	1450	4000	8000	20K	55K	130K	430K	910K	3.5	8.0	33.0
14.5	40	80	225	600	1500	4300	8200	22K	56K	150K	450K	1000K	3.6	8.2	36.0
15.0	43	82	240	620	1600	4450	8500	22.5K	60K	160K	470K	1100K	3.9	8.5	39.0
16.0	44.5	85	250	650	1750	4500	8950	24K	62K	175K	500K	1200K	4.0	9.0	43.0
17.5	45	89.5	270	680	1800	4700	9000	25K	65K	180K	510K	1250K	4.3	9.1	47.0
18.0	47	90	300	700	2000	5000	9100	27K	68K	200K	550K	1300K	4.5	10.0	50.0
20.0	50	91	330	750	2200	5100	9950	30K	70K	220K	560K	1500K	4.7	12.0	100.0

SPRAGUE TUBULAR PAPER CAPACITORS

MIDGET® TUBULARS



mallest reliable paper tubular.
utstanding humidity performance.
ill fit in pocket and auto radios.
ated for 85° C. (185° F.) operation.

100 WVDC

ue No.	µf	D. x L. In.	Net
	.25	15/32 x 1⅛	**$0.42**
	.5	⅝ x 1⅛	**.48**

200 WVDC

ue No.	µf	D. x L. In.	Net
	.005	¼ x 11/16	**$0.21**
	.006	¼ x 11/16	**.21**
	.01	9/32 x 11/16	**.24**
	.02	9/32 x 13/16	**.27**
	.05	5/16 x 1	**.30**
	.1	13/32 x 1	**.36**
	.2	15/32 x 1⅛	**.39**
	.25	17/32 x 1⅛	**.42**
	.5	⅝ x 1⅜	**.48**

400 WVDC

Sprague No.	µf	D. x L. In.	Net
68P1	.001	¼ x 11/16	**$0.21**
68P3	.003	¼ x 11/16	**.21**
68P4	.004	¼ x 11/16	**.21**
68P5	.005	¼ x 13/16	**.21**
68P6	.006	¼ x 13/16	**.21**
68P8	.01	5/16 x 13/16	**.24**
68P9	.02	5/16 x 1	**.27**
68P10	.05	13/32 x 1	**.30**
68P21	.1	15/32 x 1⅛	**.39**
68P38	.2	⅝ x 1⅛	**.42**
68P22	.25	⅝ x 1⅜	**.45**
68P23	.5	⅝ x 2 5/16	**.51**

600 WVDC

Sprague No.	µf	D. x L. In.	Net
68P26	.001	¼ x 11/16	**$0.21**
68P27	.002	¼ x 11/16	**.21**
68P28	.003	9/32 x 11/16	**.21**
68P29	.004	9/32 x 13/16	**.21**
68P30	.005	9/32 x 13/16	**.24**
68P31	.006	5/16 x 13/16	**.24**
68P32	.008	5/16 x 1	**.24**
68P33	.01	5/16 x 1	**.27**
68P34	.02	11/32 x 1	**.30**
68P35	.05	15/32 x 1⅛	**.33**
68P36	.1	⅝ x 1⅛	**.42**
68P40	.2	⅝ x 1 11/16	**.48**
68P37	.25	⅝ x 2	**.48**

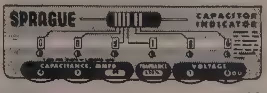
HASH CAPACITORS FOR AUTOMOBILE RADIOS

- HC-1—Braided leads for low RF resistance.
- HC-3—Flat strap leads for minimum RF resistance.

Sprague No.	µf	WVDC	Size, Inches	Net Each
HC-1	.5	120	7/16 x ¾ x 2*	**$0.54**
HC-3	.5	120	¾ x 1⅜†	**.66**

*Oval tube. †Round tube.

COLOR-CODE INDICATOR

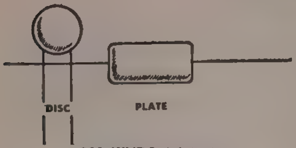


Deciphers the color coding on molded tubular capacitors. Simply flick the dials to the color bands and read the capacitance, tolerance, and voltage directly on indicator. Pocket-size, made of plastic.
Sprague No. C-751—
Net Each.............................. **15c**

SPRAGUE Ceramic Capacitors

CERA-MITE® CERAMIC CAPACITORS

GENERAL APPLICATION TYPES



- Tiny, tough, dependable in every application.
- Low self-inductance of silvered flat-plate design means very high by-pass efficiency in all TV circuits.
- Ideal where temperature coefficient is not important, such as by-pass and coupling uses.
- Excellent replacements for foil-micas a tubular ceramics.
- Designed for 85° C (185° F) operation
- Amazingly small in size—can be us almost anywhere.
- Heavy moisture-resistant insulat coating.

300 WVDC (plates)
Std. Tolerance ±20%

Sprague No.	μμf	Net Each
3GAB-T47	470	21c
3GAB-D1	1000	21c
3GAB-D22	2200	27c
3GAB-D47	4700	27c
3GAB-S1	10000	39c
3GAB-S22	.022 μf	39c
3GAB-S47	.047	42c
3GAB-P1	.1	45c
3GAB-P15	.15	48c

400 WVDC (discs)
Std. Tolerance ±20%

Sprague No.	μμf	Net Each
4GA-Q1	10	15c
4GA-Q15	15	15c
4GA-Q22	22	15c
4GA-Q33	33	15c
4GA-Q47	47	15c
4GA-Q68	68	15c
4GA-T1	100	15c
4GA-T15	150	15c
4GA-T22	220	15c
4GA-T33	330	15c
4GA-T47	470	15c

1000 WVDC (discs)
Std. Tolerance ±20%

Sprague No.	μμf	Net Each
5GA-V5	5	15c
5GA-V6	6	15c
5GA-V75	7.5	15c
5GA-V8	8	15c
5GA-Q1	10	15c
5GA-Q12	12	15c
5GA-Q15	15	15c
5GA-Q18	18	15c
5GA-Q2	20	15c
5GA-Q22	22	15c
5GA-Q25	25	15c
5GA-Q27	27	15c
5GA-Q3	30	15c
5GA-Q33	33	15c
5GA-Q39	39	15c
5GA-Q47	47	15c
5GA-Q5	50	15c
5GA-Q56	56	15c
5GA-Q68	68	15c
5GA-Q75	75	15c
5GA-Q82	82	15c
5GA-Q91	91	15c
5GA-T1	100	15c
5GA-T12	120	15c
5GA-T13	130	15c
5GA-T15	150	15c
5GA-T18	180	15c
5GA-T2	200	15c
5GA-T22	220	15c
5GA-T24	240	15c
5GA-T25	250	15c
5GA-T27	270	15c
5GA-T3	300	15c
5GA-T33	330	15c
5GA-T35	350	15c
5GA-T36	360	15c
5GA-T39	390	15c
5GA-T4	400	15c
5GA-T47	470	15c
5GA-T5	500	15c
5GA-T56	560	15c
5GA-T6	600	15c
5GA-T68	680	15c
5GA-T75	750	15c
5GA-T8	800	15c
5GA-T82	820	15c
5GA-D1	1000	15c
5GA-D12	1200	15c
5GA-D13	1300	15c
5GA-D15	1500	15c
5GA-D16	1600	15c
5GA-D18	1800	15c
5GA-D2	2000	15c
5GA-D22	2200	15c
5GA-D25	2500	15c
5GA-D27	2700	15c
5GA-D3	3000	15c
5GA-D33	3300	15c
5GA-D39	3900	15c
5GA-D4	4000	15c
5GA-D43	4300	18c
5GA-D47	4700	18c
5GA-D5	5000	18c

500 WVDC (discs)
Std. Tolerance ±20%

Sprague No.	μμf	Net Each
5GA-S1	10,000	18c
5GA-S2	20,000	18c

1000 WVDC (plates)
Std. Tolerances:
Type 10GAB-V47 ±.5 μμf,
Other types 10GAB ±20%,
types 10HKB MRC

Sprague No.	μμf	Net Each
10GAB-V47	4.7	18c
10GAB-Q1	10	18c
10GAB-Q18	18	18c
10GAB-Q22	22	18c
10GAB-Q25	25	18c
10GAB-Q33	33	18c
10GAB-Q39	39	18c
10GAB-Q47	47	18c
10GAB-Q68	68	18c
10GAB-Q75	75	18c
10GAB-Q82	82	18c
10GAB-T1	100	18c
10GAB-T12	120	18c
10GAB-T15	150	18c
10GAB-T18	180	18c
10GAB-T2	200	18c
10GAB-T22	220	18c
10GAB-T25	250	18c
10GAB-T27	270	18c
10GAB-T3	300	18c
10GAB-T33	330	18c
10GAB-T39	390	18c
10GAB-T47	470	18c
10GAB-T5	500	30c
10GAB-T56	560	30c
10HKB-T68*	680	30c
10HKB-D1*	1000	30c
10HKB-D12	1200	30c
10HKB-D15*	1500	30c
10HKB-D22*	2200	30c
10HKB-D33*	3300	30c
10HKB-D47*	4700	30c
10HKB-S1*	.01 μf	36c
10HKB-S15*	.015	66c
10HKB-S22*	.022	81c

*High-K Types.

1500 WVDC (plates)
Std. Tolerances:
Thru 4.7 μμf ±.5 μμf,
all others ±20%.

Sprague No.	μμf	Net Each
15GAB-V33	3.3	18c
15GAB-V47	4.7	18c
15GAB-V6	6	18c
15GAB-V75	7.5	18c
15GAB-Q1	10	18c
15GAB-Q12	12	18c
15GAB-Q15	15	18c
15GAB-Q18	18	18c
15GAB-Q2	20	18c
15GAB-Q22	22	18c
15GAB-Q33	33	18c
15GAB-Q47	47	18c
15GAB-Q56	56	18c
15GAB-Q62	62	18c
15GAB-Q68	68	18c
15GAB-Q82	82	21c
15GAB-T1	100	21c
15GAB-T15	150	21c
15GAB-T18	180	21c
15GAB-T22	220	21c
15GAB-T3	300	21c
15GAB-T33	330	21c
15GAB-T39	390	21c
15GAB-T47	470	21c

2000 WVDC (discs)
Std. Tolerances: Thru 5 μμf ± .5 μμf, th 82 μμf ±10%, thru 1000 μμf ±20%, thr 6000 μμf MRC.

Sprague No.	μμf	Net Each
20GA-V33	3.3	21c
20GA-V5	5	21c
20GA-V75	7.5	21c
20GA-Q1	10	21c
20GA-Q12	12	21c
20GA-Q15	15	21c
20GA-Q18	18	21c
20GA-Q2	20	21c
20GA-Q22	22	21c
20GA-Q33	33	21c
20GA-Q39	39	21c
20GA-Q47	47	21c
20GA-Q56	56	21c
20GA-Q62	62	21c
20GA-Q68	68	21c
20GA-Q75	75	21c
20GA-Q82	82	21c
20GA-T1	100	21c
20GA-T12	120	21c
20GA-T15	150	21c
20GA-T18	180	21c
20GA-T2	200	21c
20GA-T22	220	21c
20GA-T3	300	21c
20GA-T33	330	21c
20GA-T39	390	21c
20GA-T47	470	21c
20GA-T5	500	21c
20GA-D1	1000	33c
20HK-D4*	4000	33c
20HK-D5*	5000	42c
20HK-D6*	6000	42c

*High-K Types

2000 WVDC (plates)
Std. Tolerances: 5μμf, ± .5 μμf, other ty 20GAB ±20%, types 20HKB MRC.

Sprague No.	μμf	Net Eac
20GAB-V5	5	21c
20GAB-Q1	10	21c
20GAB-Q15	15	21c
20GAB-Q22	22	21c
20GAB-Q3	30	21c
20GAB-Q33	33	21c
20GAB-Q39	39	21c
20GAB-Q47	47	21c
20GAB-T1	100	21c
20GAB-T15	150	21c
20GAB-T2	200	21c
20HKB-T22*	220	21c
20HKB-T3*	300	21c
20HKB-T5*	500	21c
20HKB-D1*	1000	33c
20HKB-D5*	5000	42c
20HKB-D8*	8000	42c
20HKB-S1*	1000	42c

*High-K Types

3000 WVDC (discs)
Std. Tolerances:
1.5 μμf ± .25 μμf,
4.7 μμf ± .5 μμf,
thru 68 μμf ±10%,
thru 500 μμf ±20%

Sprague No.	μμf	Net Eac
30GA-V15	1.5	24c
30GA-V47	4.7	24c
30GA-Q1	10	24c
30GA-Q12	12	24c
30GA-Q15	15	24c
30GA-Q25	25	24c
30GA-Q3	30	24c
30GA-Q39	39	24c
30GA-Q5	50	24c
30GA-Q6	60	24c
30GA-Q68	68	24c
30GA-T1	100	24c
30GA-T12	120	24c
30GA-T15	150	24c
30GA-T18	180	24c
30GA-T2	200	24c
30GA-T22	220	24c
30GA-T25	250	24c
30GA-T27	270	24c
30GA-T3	300	24c
30GA-T5	500	24c

'RAGUE Ceramic Capacitors

CERA-MITE® CERAMIC CAPACITORS (CONT.)

3000 WVDC (plates)

Std. Tolerances:
1.5 μμf ± .25 μμf,
4.7 μμf ± .5 μμf,
other types 30GAB ±20%

ague No.	μμf	Net Each
AB-V15	1.5	24c
AB-V47	4.7	24c
AB-Q1	10	24c
AB-Q15	15	24c
AB-Q47	47	24c
AB-Q6	60	24c
AB-Q68	68	24c
AB-T1	100	24c
AB-T12	120	24c
AB-T15	150	24c
AB-T18	180	24c

5000 WVDC (discs)

Std. Tolerances:
4.7 μμf ± .5 μμf,
thru 22 μμf ±10%,
thru 500 μμf ±20%

ague No.	μμf	Net Each
A-V47	4.7	27c
A-Q1	10	27c
A-Q22	22	27c
A-Q47	47	27c
A-T1	100	27c
A-T22	220	27c
A-T33	330	33c
A-T5	500	60c

6000 WVDC (plates)

Std. Tolerances:
4.7 μμf ± .5 μμf,
other types 60GAB ±20%,
types 60HKB MRC

ague No.	μμf	Net Each
AB-V47	4.7	30c
AB-V82	8.2	30c
AB-Q1	10	30c
AB-Q12	12	30c
AB-Q15	15	30c
AB-Q18	18	30c
AB-Q2	20	30c
AB-Q22	22	30c
AB-Q3	30	30c
AB-Q33	33	30c
AB-Q47	47	30c
KB-T1*	100	30c
KB-T47*	470	39c

-K Types.

7500 WVDC (discs)

Std. Tolerances:
4.7 μμf ± .5 μμf,
thru 18 μμf ±10%,
thru 470 μμf ±20%

ague No.	μμf	Net Each
A-V47	4.7	30c
A-V82	8.2	30c
A-Q1	10	30c
A-Q12	12	30c
A-Q15	15	30c
A-Q18	18	30c
A-Q2	20	30c
A-Q22	22	30c
A-Q3	30	30c
A-Q33	33	30c
A-Q47	47	30c
A-Q56	56	30c
A-T1	100	30c
A-T47	470	39c

NPO TYPES

- Zero Temperature-coefficient Capacitors
- Used Where Capacitance Change with Temperature is Undesirable
- Superior to Silvered-mica Types in Stability, High "Q", and Insulation Resistance
- Rated at 500 WVDC
- Units listed below are disc capacitors, except those marked with a star (*), which are plate capacitors.

Sprague No.	μμf	Net Each
5TCCB-V1*	1.0	30c
5TCCB-V15*	1.5	30c
5TCCB-V22*	2.2	30c
5TCCB-V33*	3.3	30c
5TCCB-V47*	4.7	30c
5TCCB-V68*	6.8	30c
5TCC-Q1	10	30c
5TCC-Q15	15	30c
5TCC-Q2	20	30c
5TCC-Q22	22	30c
5TCC-Q25	25	30c
5TCC-Q33	33	30c
5TCC-Q39	39	33c
5TCC-Q47	47	33c
5TCC-Q5	50	33c
5TCC-Q68	68	33c
5TCC-Q75	75	33c
5TCC-T1	100	33c
5TCC-T12	120	36c
5TCC-T15	150	36c
5TCC-T175	175	36c
5TCC-T22	220	42c
5TCC-T27	270	48c

N750 TYPES

- Used For Temperature Compensation to Eliminate Frequency Drifts
- Negative Temperature Coefficient is 750 ppm/° C.
- Often Used in Combination with NPO Types
- Rated at 500 WVDC
- Units listed below are disc capacitors, except starred (*) item, which is a plate capacitor.

Sprague No.	μμf	Net Each
5TCUB-V5*	5.0	30c
5TCU-Q1	10	30c
5TCU-Q15	15	30c
5TCU-Q2	20	30c
5TCU-Q22	22	30c
5TCU-Q25	25	30c
5TCU-Q33	33	30c
5TCU-Q47	47	30c
5TCU-Q68	68	30c
5TCU-Q75	75	30c
5TCU-T1	100	30c
5TCU-T15	150	30c
5TCU-T2	200	30c
5TCU-T22	220	30c
5TCU-T33	330	30c

HIGH-K TYPES

- Designed Specifically for Minimum Capacitance Requirements
- Intended for By-pass and Coupling Applications where Additional Capacitance is Not Important
- Rated at 1000 WVDC—disc type.

SINGLE UNITS

Sprague No.	μf	Net Each
5HK-D1	.001	15c
5HK-D15	.0015	15c
5HK-D2	.002	15c
5HK-D22	.0022	15c
5HK-D25	.0025	15c
5HK-D33	.0033	15c
5HK-D4	.004	15c
5HK-D47	.0047	15c
5HK-D5	.005	15c
5HK-D68	.0068	15c
5HK-S1	.01	18c
5HK-S15	.015	24c
5HK-S2	.02	36c
5HK-S25	.025	39c
5HK-S3	.03	39c
5HK-S5†	.05	42c
5HK-P1†	.1	48c

DUAL UNITS

5HK-2D1	2 x .001	24c
5HK-2D15	2 x .0015	24c
5HK-2D2	2 x .002	24c
5HK-2D22	2 x .0022	24c
5HK-2D4	2 x .004	27c
5HK-2D47	2 x .0047	27c
5HK-2S1	2 x .01	30c
5HK-2S2†	2 x .02	42c

†500 WVDC.

DISC CERAMICS FOR AC APPLICATIONS

Rated at 125 v.AC, Std. Tol. ±20%.

Sprague No.	μf	Net Each
125L-D10	.001	15c
125L-D15	.0015	15c
125L-D20	.002	15c
125L-D47	.0047	18c
125L-D50	.005	18c
125L-S10	.01	18c
125L-S15	.015	30c
125L-S20	.02	30c
125L-2D50	2 x .005	30c
125L-2S10	2 x .01	33c

DISC CERAMICS FOR BUFFER APPLICATIONS

Rated at 2000 WVDC, Std. Tol. ±20%.

Sprague No.	μf	Net Each
BL-D10	.001	21c
BL-D20	.002	21c
BL-D30	.003	21c
BL-D40	.004	21c
BL-D50	.005	21c
BL-D60	.006	21c
BL-D70	.007	21c
BL-D75	.0075	21c
BL-D80	.008	21c
BL-S10	.01	21c

IIATURIZED DISC CERAMIC TYPES

- Fit Crowded Spaces in New Transistorized Sets.
- Tiny in Size, But Tough and Dependable.
- High-K Type for Coupling and By-pass Applications.
- Rated at 50 WVDC.

ue No. TG-D50—Capacity, .005 μf. Net Each........**27c**
ue No. TG-S10—Capacity, .01 μf. Net Each.........**39c**
ue No. TG-S20—Capacity, .02 μf. Net Each.........**39c**
ue No. TG-S25—Capacity, .025 μf. Net Each........**39c**
ue No. TG-S30—Capacity, .03 μf. Net Each.........**39c**
ue No. TG-S50—Capacity, .05 μf. Net Each.........**42c**
ue No. TG-P10—Capacity, .1 μf. Net Each..........**54c**

SPRAGUE "T-C" RULE FOR CERAMICS

- Quickly finds the values of N750 and NPO temperature compensating capacitors which can be connected in parallel to equal a capacitor of desired intermediate temperature coefficient of a specific capacitance.
- Every service technician should have one of these hand sliding rules.

Sprague No. C-753—Net Each..............................**15c**

SPRAGUE UNIVERSAL DOORKNOB CERAMIC CAPACITOR (MOLDED PLASTIC)

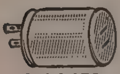
WITH SCREW-IN TERMINALS TO FIT ALL TV SETS

- A new idea in high voltage ceramic capacitor design.
- Molded in non-inflammable, moisture-resistant thermosetting plastic.
- Molded guard rings lengthen surface creepage path.
- **20DK-T5** packaged two to a clear plastic box with giant assortment of screw-in terminals to fit all TV sets.
- **30DK-T5** comes with plain screw-in terminals to meet all 27" TV set requirements.

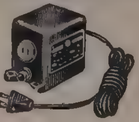
Sprague No.	μμf	W.V.D.C.	Diameter x Length	Net Price
20DK-T5	500	20,000	1" x 31/32"	$1.11
30DK-T5	500	30,000	1 5/16" x 1 1/4"	1.80

Interference Filters, Capacitors

CORNELL DUBILIER "QUIETONE" INTERFERENCE FILTERS


IF4 & IF5

IF24


IF21

RADIO, TV AND APPLIANCE "QUIETONES"

Rating 110 Volts AC-DC, 5 Amps.

Type IF-4—For use on small radio receivers when noise level is not too severe. Connects between line cord and wall receptacle. 110 volts, AC-DC, 5 amps. Ivory, walnut or green. Weight, 5 oz. Net Each.. **75c**

Type IF-5—For small electrical appliances. Plug type filter. For low intensity interference. 110 volts AC-DC. 5 amps. Ivory, walnut or green plastic. Weight, 5 oz. Net Each.......... **75c**

Type IF-6—For electrical appliances which radiate noise of moderate intensity. Plug type, 110 volts, AC-DC, 5 amps. Ivory, walnut or green finish. Weight, 6 oz. Net Each... **$1.17**

Type IF-18—For use where noise level is severe. Bakelite case. 110 volts, AC-DC, 5 amps. Ivory or walnut. Weight, 4 lbs. Net Each.. **$5.52**

Type IF-19—Capacitive-inductive filter for severe interference. 110 volts, AC-DC, 5 amps. Brown or ivory bakelite. Weight, 1½ lbs. Net Each.......... **$4.62**

Type IF-20—For use on small appliances where interference is very low. Plugs between appliance and wall socket. 110 volts, AC-DC, 5 amps. Ivory or walnut bakelite case. Weight, 4 oz. Net Each.. **51c**

Type IF-21—All-wave capacitive-inductive filter for use where return lead to frame of appliance cannot be made. 110-volt AC-DC, 1.6 amps. Ivory or walnut bakelite. Shipping Weight, 1¾ lbs. Net Each.. **$2.64**

1 For installation as an accessory of a portable or sem permanent nature on radios, television receivers, househo and office appliances (i.e. IF-4 and IF-19). **Rating 110 Volts AC-DC, 5 Amps.**

2 For permanent installation directly at the source of th offending equipment (i.e. IF-7A and IF-54). NF type filte shown are for installation inside of the appliances. Se "Industrial Quietones" below.

INDUSTRIAL "QUIETONES"

Industrial "Quietone" Filter Units are for suppressing interferen generated by industrial type electrically operated equipment suc as stokers, elevators, refrigeration equipment, generators an heavy duty motors. No current limitations for capacitative (C "Quietones".

IF Series

C-D No.	Volts AC-DC	Maximum Amps	Connections	Housing	Net Each
IF-7A	110-220	5	BX	Cutout box	**$8.25**
IF-24	110	...	Flex-leads	Metal	**.75**
IF-25	110-220	...	Flex-leads	Metal	**2.9**
IF-54	110-220	2	Flex-leads	Metal	**1.5**

NF Series

C-D No.	Volts AC-DC	Cap. μf	Circuit	Housing	Net Each
NF-10135	110-220	.02- .002- .002	DELTA	Metal*	**$1.05**
NF-10148	110-220	.075- .075 .075- .006	WYE	Waxed paper†	**1.2**
NF-10150	110-220	.07- .07- .07	DELTA	Metal‡	**.9**
NF-10230	125	.09- .005- .005	DELTA	Waxed paper‡	**.5**
NF-1A164	120	.1- .001	DUAL	Waxed paper†	**.4**
NF-1H113	160	.006- .075- .075	WYE	Waxed paper†	**.7**

*Tubular—Tangential Bracket. †Tubular-No Bracket. ‡Tubular—Strap Mount.

"QUIETONE" PI FILTERS

PI filters are available in a wide range of insertion loss characteristics to fit all requirements. Hundreds of standard designs in single and multiple circuits. Current ratings up to 350 amperes in voltage ratings up to 2000 cy. AC or DC. Will provide maximu insertion loss at all frequencies from 14 kc to 1,000 megacycle consistent with size and weight limits of a specific applicatio

C-D No.	Voltage		Current Amps.	Line Freq. Cycles	Insertion Loss in Decibels* at Frequency in Megacycles							Net Each
	AC	DC			.16	1.0	20	50	100	200	400	
NF-10335	....	50	20	....	65	80	65	45	40	40	....	**$10.05**
NF-10360-1	....	100	5.0	....	50	80	85	70	60	55	50	**5.70**
NF-10280-1†	125	300	2.0	0-60	55	70	60	50	40	40	....	**9.84**
NF-1H197	130	400	1.0	0-400	52	95	85	70	70	60	50	**5.25**
NF-10315-1J	130	500	7.0	0-1700	55	90+	90+	90+	75	70	60	**12.3**
NF-10286-1†	220	400	15	0-60	60	100+	90+	75	85	65	60	**32.4**

†2 Circuit (Identical) Filter.
*INSERTION LOSS: DB values are as measured in a 50 ohm test circuit with complete shielding between Input and Output lead of the Filter.

SPRAGUE DIFILM® BLACK BEAUTY® MOLDED TUBULAR CAPACITORS

200 WVDC

Sprague No.	μf	D. x L. In.	Net
2TM-S2	.02	3/8 x 1 1/4	**$0.15**
2TM-S22	.022	3/8 x 1 1/4	**.15**
2TM-S47	.047	7/16 x 1 1/4	**.15**
2TM-S5	.05	7/16 x 1 1/4	**.15**
2TM-P1	.1	1/2 x 1 1/2	**.21**
2TM-P15	.15	1/2 x 1 1/2	**.21**
2TM-P22	.22	5/8 x 1 7/8	**.24**
2TM-P25	.25	5/8 x 1 7/8	**.24**
2TM-P47	.47	3/4 x 2 1/4	**.36**
2TM-P5	.5	3/4 x 2 1/4	**.36**
2TM-M1	1.0	3/4 x 2 1/4	**.54**

400 WVDC

Sprague No.	μf	D. x L. In.	Net
4TM-S1	.01	3/8 x 1 1/4	**$0.15**
4TM-S15	.015	3/8 x 1 1/4	**.15**
4TM-S2	.02	3/8 x 1 1/4	**.15**
4TM-S22	.022	3/8 x 1 1/4	**.18**
4TM-S25	.025	7/16 x 1 1/4	**.18**
4TM-S3	.03	7/16 x 1 1/4	**.18**
4TM-S4	.04	7/16 x 1 1/4	**.18**
4TM-S47	.047	7/16 x 1 1/4	**.18**
4TM-S5	.05	7/16 x 1 1/4	**.18**
4TM-S68	.068	1/2 x 1 1/2	**.21**
4TM-P1	.1	1/2 x 1 1/2	**.21**
4TM-P15	.15	5/8 x 1 7/8	**.24**
4TM-P2	.2	5/8 x 1 7/8	**.24**
4TM-P22	.22	5/8 x 1 7/8	**.24**
4TM-P25	.25	3/4 x 2 1/4	**.24**
4TM-P47	.47	3/4 x 2 1/4	**.36**
4TM-P5	.5	3/4 x 2 1/4	**.36**
4TM-M1	1.0	1 x 2 1/2	**.54**

600 WVDC

Sprague No.	μf	D. x L. In.	Net
6TM-T1	.0001	5/16 x 1	**$0.15**
6TM-T25	.00025	5/16 x 1	**.15**
6TM-T4	.0004	5/16 x 1	**.15**
6TM-T5	.0005	5/16 x 1	**.15**
6TM-D1	.001	5/16 x 1	**.15**
6TM-D15	.0015	5/16 x 1	**.15**
6TM-D2	.002	5/16 x 1	**.15**
6TM-D22	.0022	5/16 x 1	**.15**
6TM-D25	.0025	5/16 x 1	**.15**
6TM-D3	.003	5/16 x 1	**.15**
6TM-D33	.0033	5/16 x 1	**.15**
6TM-D4	.004	3/8 x 1 1/4	**.15**
6TM-D47	.0047	3/8 x 1 1/4	**.15**

600 WVDC (Cont'd)

Sprague No.	μf	D. x L. In.	Net
6TM-D5	.005	3/8 x 1 1/4	**$0.15**
6TM-D6	.006	3/8 x 1 1/4	**.15**
6TM-D68	.0068	3/8 x 1 1/4	**.18**
6TM-D8	.008	3/8 x 1 1/4	**.18**
6TM-S1	.01	3/8 x 1 1/4	**.18**
6TM-S15	.015	3/8 x 1 1/4	**.18**
6TM-S2	.02	7/16 x 1 1/4	**.18**
6TM-S22	.022	7/16 x 1 1/4	**.18**
6TM-S3	.03	7/16 x 1 1/4	**.21**
6TM-S33	.033	7/16 x 1 1/4	**.21**
6TM-S35	.035	7/16 x 1 1/4	**.21**
6TM-S4	.04	1/2 x 1 1/2	**.21**
6TM-S47	.047	1/2 x 1 1/2	**.24**
6TM-S5	.05	1/2 x 1 1/2	**.24**
6TM-S6	.06	1/2 x 1 1/2	**.24**
6TM-S68	.068	1/2 x 1 1/2	**.27**
6TM-P1	.1	5/8 x 1 7/8	**.27**
6TM-P15	.15	5/8 x 1 7/8	**.30**
6TM-P2	.2	3/4 x 2 1/4	**.33**
6TM-P22	.22	3/4 x 2 1/4	**.33**
6TM-P25	.25	3/4 x 2 1/4	**.33**
6TM-P5	.5	1 x 2 1/2	**.48**
6TM-M1	1.0	1 x 2 1/2	**.75**

1000 WVDC

Sprague No.	μf	D. x L. In.	Net
10TM-T5	.0005	5/16 x 1	**$0.30**
10TM-D1	.001	5/16 x 1	**.30**
10TM-D15	.0015	5/16 x 1	**.30**
10TM-D2	.002	3/8 x 1 1/4	**.30**
10TM-D22	.0022	3/8 x 1 1/4	**.30**
10TM-D3	.003	3/8 x 1 1/4	**.30**
10TM-D4	.004	3/8 x 1 1/4	**.30**
10TM-D47	.0047	3/8 x 1 1/4	**.30**
10TM-D5	.005	3/8 x 1 1/4	**.30**
10TM-D68	.0068	3/8 x 1 1/4	**.30**
10TM-S1	.01	7/16 x 1 1/4	**.30**
10TM-S15	.015	1/2 x 1 1/2	**.30**
10TM-S2	.02	1/2 x 1 1/2	**.30**
10TM-S22	.022	1/2 x 1 1/2	**.30**
10TM-S3	.03	5/8 x 1 7/8	**.30**
10TM-S35	.035	5/8 x 1 7/8	**.30**
10TM-S47	.047	5/8 x 1 7/8	**.36**
10TM-S5	.05	5/8 x 1 7/8	**.36**
10TM-S68	.068	5/8 x 1 7/8	**.42**
10TM-P1	.1	3/4 x 2 1/4	**.45**

MINERAL-OIL IMPREGNATED

1600 WVDC (BUFFER CAPACITORS)

Sprague No.	μf	D. x L. In.	Net
MB-T5	.0005	3/8 x 1 1/4	**$0.39**
MB-D1	.001	3/8 x 1 1/4	**.39**
MB-D15	.0015	3/8 x 1 1/4	**.39**
MB-D2	.002	3/8 x 1 1/4	**.39**
MB-D22	.0022	3/8 x 1 1/4	**.39**
MB-D3	.003	7/16 x 1 1/4	**.39**
MB-D33	.0033	7/16 x 1 1/4	**.39**
MB-D4	.004	7/16 x 1 1/4	**.39**
MB-D47	.0047	7/16 x 1 1/4	**.39**
MB-D5	.005	7/16 x 1 1/4	**.39**
MB-D6	.006	1/2 x 1 1/2	**.39**
MB-D68	.0068	1/2 x 1 1/2	**.39**
MB-D7	.007	1/2 x 1 1/2	**.39**
MB-D75	.0075	1/2 x 1 1/2	**.39**
MB-D8	.008	1/2 x 1 1/2	**.39**
MB-S1	.01	1/2 x 1 1/2	**.42**
MB-S15	.015	5/8 x 1 7/8	**.42**
MB-S2	.02	5/8 x 1 7/8	**.42**
MB-S22	.022	5/8 x 1 7/8	**.42**
MB-S3	.03	5/8 x 1 7/8	**.42**
MB-S4	.04	5/8 x 1 7/8	**.42**
TR-15*	.05	3/4 x 2 1/8	**.4**
TR-215*	2 x .015	3/4 x 2	**.48**

6000 WVDC

Sprague No.	μf	D. x L. In.	Net
TVM-356	.0005	1/2 x 1 1/2	**$0.8**
TVM-216	.001	1/2 x 1 1/2	**.8**
TVM-256	.005	5/8 x 1 7/8	**.8**

10,000 WVDC

Sprague No.	μf	D. x L. In.	Net
TVM-351	.0005	5/8 x 1 7/8	**$0.9**

12,500 WVDC

Sprague No.	μf	D. x L. In.	Net
12TVM-325	.00025	5/8 x 1 7/8	**$1.0**

*Supplied in waxed cardboard units pending completion of molds.

Electrolytic Capacitors

"BLUE BEAVER" CAPACITORS

Designed expressly
for service replace-
ment applications.
Compact unit in an
aluminum can with
cardboard outer
igid tinned copper leads support
assis. Larger sizes may be further
d by means of a metal strap.
terminal grounded to can. Tem-
range to +85° C. except 500
its, to +65° C.

PE BR SINGLE UNITS

ize add 1/16" d. x 3/16" l.

6 VDC WORKING

o.	Cap. µf	Size, In. Dia. x Lgth.	Net Each
0-6	500	¾x1 11/16	$0.93
00-6	1000	⅞x2	1.14
00-6	2000	1 x2½	1.38

15 VDC WORKING

01	250	¾x1 11/16	$0.93
01	500	⅞x2	1.05
001	1000	1 x2	1.38
001	2000	1 x3	1.92

25 VDC WORKING

02	250	⅞x1 11/16	$1.02
02	500	1 x2	1.38

50 VDC WORKING

05	100	¾x2	$0.84
05	150	⅞x2	.93
05	250	1 x2	1.05
05	500	1 x3	1.44

150 VDC WORKING

15	25	¾x1 7/16	$0.75
15	30	¾x1 7/16	.78
15	40	¾x1 11/16	.81
15	50	⅞x1 11/16	.84
15	60	⅞x2	.90
15	80	⅞x2	.96
015	100	1 x2½	1.05
015	150	1 x3	1.14
015	200	1 x3	1.32
015	300	1 x4 1/16	1.53

250 VDC WORKING

25	16	¾x1 11/16	$0.78
25	20	¾x1 11/16	.81
25	30	⅞x1 11/16	.87
25	40	⅞x2	.93
25	50	1 x2	1.02
25	60	1 x2½	1.08

350 VDC WORKING

5	4	⅝x1 7/16	$0.63
5	8	⅝x1 11/16	.72
35	12	¾x1 11/16	.78
35	16	⅞x1 11/16	.84
35	20	⅞x1 11/16	.87
35	30	1 x2	.99
35	40	1 x2½	1.05
35	50	1 x2½	1.11
35	60	1 x2½	1.17
35	80	1 x3 9/16	1.26
035	100	1 x4 1/16	1.38

450 VDC WORKING

5	1	⅝x1 1/16	$0.66
5	2	⅝x1 1/16	.66
5	4	⅝x1 7/16	.69
5	8	¾x1 7/16	.75
45	10	¾x1 11/16	.78
45	12	¾x1 11/16	.81
45	16	⅞x2	.84
045	20	⅞x2	.93
045	30	1 x2½	1.02
045	40	1 x2½	1.08
045	50	1 x3	1.26
045	60	1 x3 9/16	1.41
045	80	1 x4 1/16	1.68
0045	100	1 x4 1/16	1.92

500 VDC WORKING

50	4	⅝x1 11/16	$0.72
50	8	¾x1 11/16	.78
250	8	⅞x2	.84
550	16	1 x2	.90
050	20	1 x2	.96
050	30	1 x2½	1.05

TYPE BRHV
600 VDC WORKING

604	4	13/16x2 7/16	$1.17
608	8	13/16x3 3/16	1.26
610	10	15/16x3 3/16	1.32
612	12	1 1/16x3 3/16	1.44
616	16	1 1/16x3 3/16	1.53
620	20	1 1/16x3 11/16	1.62

700 VDC WORKING

C-D No.	Cap. µf	Size, In. Dia. x Lgth.	Net Each
BRHV 708	8	13/16x3 3/16	$1.32
BRHV 710	10	1 1/16x3 3/16	1.41
BRHV 712	12	1 1/16x3 11/16	1.47
BRHV 716	16	1 1/16x4 5/16	1.59

TYPE BBR "BLUE BEAVERS"

These miniature versions of Type BR are especially popular for cramped and limited space installations. Hermetically sealed in tubular aluminum containers. **Negative terminal grounded to can.** Temp. range to +85° C. Overall size add 1/16" d. x 5/32" l.

3-VOLT DC WORKING

C-D No.	Cap. µf	Can Size, In. Dia. x Lgth.	Net Each
BBR 25-3	25	⅜ x 1 1/16	$0.51
BBR 50-3	50	⅜ x 1 1/16	.57

6-VOLT DC WORKING

C-D No.	Cap. µf	Can Size, In. Dia. x Lgth.	Net Each
BBR 5-6	5	⅜ x 1 1/16	$0.48
BBR 25-6	25	⅜ x 1 1/16	.51
BBR 50-6	50	⅜ x 1 1/16	.57
BBR 100-6	100	½ x 1 1/16	.72
BBR 250-6	250	½ x 1 7/16	.81

15-VOLT DC WORKING

BBR 100-15	100	½ x 1 1/16	$0.75

25-VOLT DC WORKING

BBR 10-25	10	⅜ x 1 1/16	$0.60
BBR 20-25	20	⅜ x 1 1/16	.60
BBR 25-25	25	⅜ x 1 1/16	.60
BBR 50-25	50	½ x 1 1/16	.66
BBR 100-25	100	½ x 1 7/16	.81

50-VOLT DC WORKING

BBR 1-50	1	⅜ x 1 1/16	$0.54
BBR 2-50	2	⅜ x 1 1/16	.54
BBR 4-50	4	⅜ x 1 1/16	.60
BBR 5-50	5	⅜ x 1 1/16	.60
BBR 10-50	10	⅜ x 1 1/16	.60
BBR 25-50	25	½ x 1 1/16	.63

90-VOLT DC WORKING

BBR 10-90	10	½ x 1 1/16	$0.66
BBR 16-90	16	½ x 1 7/16	.66

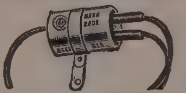
150-VOLT DC WORKING

BBR 4-150	4	⅜ x 1 1/16	$0.60
BBR 8-150	8	½ x 1 1/16	.63
BBR 10-150	10	½ x 1 1/16	.63
BBR 12-150	12	½ x 1 1/16	.66
BBR 16-150	16	½ x 1 7/16	.69
BBR 20-150	20	½ x 1 7/16	.72

250-VOLT DC WORKING

BBR 4-250	4	½ x 1 1/16	$0.60
BBR 8-250	8	½ x 1 7/16	.69
BBR 12-250	12	½ x 1 7/16	.75

MULTI-SECTION ELECTROLYTICS



Featuring direct-to-terminal internal lead construction; new high-insulation vinylite covered leads (7" long); sections sealed in aluminum tube; wax impregnated cardboard outer sleeve; rubber diaphragm-type vent insures ideal vent action. Ideal for operation at temperatures up to 85° C. Sizes range from ¾" dia. x 1 1/16" long to 1⅜" dia. x 4 3/16" l.

BBRD—DUAL COMMON NEGATIVE

C-D No.	Cap. µf	WVDC	Net Ea.
BBRD 2202	20-20	25	$0.84
BBRD 115	10-10	50	.84
BBRD 2115	20-10	150	.93
BBRD 2215	20-20	150	.99
BBRD 3215	30-20	150	1.02
BBRD 3315	30-30	150	1.08
BBRD 4215	40-20	150	1.05
BBRD 4315	40-30	150	1.08
BBRD 4415	40-40	150	1.11
BBRD 5315	50-30	150	1.17
BBRD 5515	50-50	150	1.26
BBRD 8415	80-40	150	1.35
BBRD 8515	80-50	150	1.38
*BBRD 0183.7	100-50	150	1.80
*BBRD 101015	100-100	150	1.92
*BBRD 0196	200-5	200	2.10
BBRD 8D25	8-8	250	.96
BBRD 16825	16-8	250	1.02
BBRD 16D25	16-16	250	1.08
BBRD 2225	20-20	250	1.11

TYPE BBRD (CONT.)

C-D No.	Cap. µf	WVDC	Net Ea.
BBRD 3325	30-30	250	$1.35
*BBRD 7V225	75-20	250	1.56
*BBRD 0242	80-10	250	1.53
*BBRD 0246	120-80	250	2.40
*BBRD 0288	150-100	300	3.15
*BBRD 0334	140-5	350	2.49
BBRD 8D45	8-8	450	1.02
BBRD 16845	16-8	450	1.20
BBRD 16D45	16-16	450	1.35
*BBRD 2245	20-20	450	1.50
*BBRD 3345	30-30	450	1.80
*BBRD 4445	40-40	450	2.04
*BBRD 0576	60, 125	200, 50	1.95
BBRD 0646	20, 100	450, 25	1.32
*BBRD 0652	40, 50	450, 50	1.80
*BBRD 0722	80, 100	450, 50	2.25
*BBRD 0707	30, 50	450, 200	1.71

BBRT—TRIPLE COMMON NEGATIVE

C-D No. BBRT-	Cap. µf	WVDC	Net Each
22215	20-20-20	150	$1.32
32V215	30-25-20	150	1.35
33315	30-30-30	150	1.41
42215	40-20-20	150	1.35
43215	40-30-20	150	1.41
44215	40-40-20	150	1.41
44415	40-40-40	150	1.47
53215	50-30-20	150	1.47
*84215	80-40-20	150	1.65
*0126.5	150-150-150	150	2.85
*7V4125	75-40-10	250	2.07
*0185	40-40-40	300	2.76
*0196	120-40-10	300	2.91
*0235	60-60-5	350	2.55
*11145	10-10-10	450	1.47
*16T45	16-16-16	450	1.86
4415X25	40-40, 250	150, 10	1.56
5315X20	50-30, 200	150, 10	1.53
5315C	50-30, 20	150, 25	1.41
5515C	50-50, 20	150, 25	1.50
8415C	80-40, 20	150, 25	1.59
3215C10	30-20, 100	150, 25	1.41
2215C	20-20, 20	150, 25	1.23
3315C	30-30, 20	150, 25	1.32
4215C	40-20 20	150. 25	1.29
4315C	40-30, 20	150, 25	1.32
4415C	40-40, 20	150, 25	1.35
5315C10	50-30, 100	150, 25	1.47
*5315C25	50-30, 250	150, 25	1.86
8215C10	80-20, 100	150, 25	1.65
2225C	20-20, 20	250, 25	1.35
4225C	40-20, 20	250, 25	1.53
4425C	40-40, 20	250, 25	1.74
*0733	80-10, 100	300, 50	2.43
*0878	140-5, 200	350, 200	4.02
*2245C	20-20, 20	450, 25	1.74
*1238	5, 80-40	450, 400	2.73
*1411	30, 50, 100	450, 150, 25	2.22

BBRQ—QUADRUPLE COMMON NEGATIVE

C-D No. BBRQ-	Cap. µf	WVDC	Net Each
*111145	10-10-10-10	450	$1.92
*222245	20-20-20-20	450	2.70
*0125	20-20-20-10	450	2.55
*0170.5	40-20-20-10	450	2.82
*0174	40-40-20-20	450	3.27
33215C	30-30-20, 20	150, 25	1.74
42215C	40-20-20, 20	150, 25	1.71
44315C	40-40-30, 20	150, 25	1.80
53215C	50-30-20, 20	150, 25	1.83
*55515C	50-50-50, 20	150, 25	2.07
*0789.4	140-5, 200-30	300, 150	3.09
*0385	120-40-40, 10	300, 250	3.72
*22245C	20-20-20, 20	450, 25	2.43
*0695.3	10, 20-20-10	450, 350	2.10
*0789.5	80-60, 40, 20	350, 300, 150	3.54
*0925	140, 5, 200-30	350, 300, 200	4.59
*0805	80-10, 40, 100	400, 300, 50	3.27
*0926.5	10, 80, 40-40	450, 300, 250	2.97
*0954	10, 80, 40, 100	450, 300, 250, 50	2.88
0954.5	20, 120, 40, 100	450, 300, 250, 50	3.69

EDL—DUAL SEPARATE SECTION

Dual units in cardboard tube containers with wax-filled ends. Capacities, voltages and polarity of the leads are clearly defined by color coding stamped on the tube casing. **Temperature Range:** To +65° C.

C-D No.	Cap. µf	WVDC	Net Ea.
*EDL 2215SS	20-20	150	$0.99
*EDL 3315SS	30-30	150	1.08
*EDL 4215SS	40-20	150	1.05
*EDL 4415SS	40-40	150	1.11
*EDL 5315SS	50-30	150	1.17
*EDL 5515SS	50-50	150	1.26
*EDL 8415SS	80-40	150	1.35

*Individually packed; all others packed 5 per carton.

Special Purpose Capacitors

TYPE DYR

Type DYR Dykanol bypass capacitors are non-inductively wound. Meet MIL-C25A requirements. **Temperature Range:** −55° C to +85° C. **Standard Tolerance:** +20%, −10%.

TYPE DYR—600 WVDC

C-D No.	Cap., µf	Size†	Net
DYR 6005	.05	A	$1.74
DYR 6010	.1	A	1.77
DYR 6025	.25	A	1.86
DYR 6050	.5	B	1.98
DYR 6100	1	D	2.25
DYR 6200	2	E	3.00
DYR 60055	.05-.05	A	2.19
DYR 6011	.1-.1	A	2.22
DYR 6022X	.25-.25	B	2.25
DYR 6055	.5-.5	D	2.58
DYR 6110	1.-1.	E	3.18
DYR 6111	.1-.1-.1	A	2.52
DYR 6222	.25-.25-.25	C	2.85
DYR 6555	.5-.5-.5	E	3.45

TYPE DYR—1000 WVDC

DYR 10005	.05	A	$1.83
DYR 10010	.1	A	1.89
DYR 10025	.25	A	1.95
DYR 10050	.5	C	2.13
DYR 10100	1	E	2.64
DYR 100055	.05-.05	A	2.31
DYR 10011	.1-.1	A	2.40
DYR 10022	.25-.25	C	2.52
DYR 10055	.5-.5	E	3.27
DYR 10111X	.1-.1-.1	D	2.76
DYR 10222	.25-.25-.25	E	3.30

†SIZES, L. x W. x Thickness

A	1 13/16" x 1" x ¾"	D	2" x 1¾" x ⅞"
B	1 13/16" x 1" x ⅞"	E	2" x 2" x 1⅛"
C	2" x 1¾" x 13/16"	......	....

"ELECTOMITE®" ELECTROLYTICS

Type NLW aluminum foil capacitors are hermetically sealed into ultra-small tubular aluminum can tightly fitted with plastic sleeve to insure insulation from adjacent components. All terminal connections are securely welded. Ideal for by-pass, filter and coupling applications in low-voltage equipment. **Temperature Range:** −20° C to +85° C. **Tolerance:** −10%, +150%.

C-D No.	Cap. µf	WV DC	Can Size, In. Dia. x Lgth.	Net Each
NLW 25-3	25	3	¼ x ½	$0.75
NLW 50-3	50	3	¼ x ¾	.75
NLW 100-3	100	3	⅜ x ⅝	.84
NLW 200-3	200	3	⅜ x ⅞	.90
NLW 10-6	10	6	3/16 x ½	.81
NLW 20-6	20	6	¼ x ½	.81
NLW 40-6	40	6	5/16 x ⅝	.84
NLW 250-6	250	6	⅜ x 1¼	1.02
NLW 8-10	8	10	3/16 x ½	.81
NLW 25-10	25	10	¼ x ⅝	.81
NLW 50-10	50	10	5/16 x ¾	.90
NLW 150-10	150	10	⅜ x 1	1.05
NLW 15-12	15	12	¼ x ½	.81
NLW 100-12	100	12	⅜ x ¾	1.05
NLW 4-15	4	15	3/16 x ½	.78
NLW 5-15	5	15	3/16 x ½	.84
NLW 10-15	10	15	¼ x ½	.84
NLW 15-15	15	15	¼ x ⅝	.87
NLW 20-15	20	15	¼ x ⅝	.87
NLW 30-15	30	15	5/16 x ⅝	.90
NLW 6-25	6	25	¼ x ½	.84
NLW 10-25	10	25	¼ x ⅝	.87
NLW 15-25	15	25	5/16 x ⅝	.87
NLW 25-25	25	25	⅜ x ⅝	.93
NLW 50-25	50	25	⅜ x ⅞	1.02
NLW 100-25	100	25	⅜ x 1½	1.26
NLW 1-50	1	50	3/16 x ½	.78
NLW 2-50	2	50	3/16 x ½	.81
NLW 4-50	4	50	¼ x ½	.81
NLW 5-50	5	50	¼ x ½	.87
NLW 6-50	6	50	¼ x ⅝	.87
NLW 10-50	10	50	5/16 x ⅝	.90
NLW 20-50	20	50	⅜ x ⅝	.90
NLW 30-50	30	50	⅜ x ¾	.96
NLW 40-50	40	50	⅜ x 1	1.05
NLW 50-50	50	50	⅜ x 1¼	1.05
NLW 75-50	75	50	⅜ x 1½	1.20
NLW 2-100	2	100	¼ x ⅝	.84
NLW 10-100	10	100	⅜ x ⅞	.93
NLW 1-150	1	150	¼ x ½	.84
NLW 3-150	3	150	⅜ x ⅝	.87
NLW 4-150	4	150	⅜ x ⅝	.87
NLW 5-150	5	150	⅜ x ⅝	.93
NLW 6-150	6	150	⅜ x ¾	.93
NLW 10-150	10	150	⅜ x 1	.96
NLW 15-150	15	150	⅜ x 1¼	.96
NLW 18-150	18	150	⅜ x 1½	.96

HIGH CAPACITY DRY ELECTROLYTICS

INSULATED CAN CAPACITORS

Type FB designed for high-cap., low voltage applications. Lug terminals on molded bakelite cover. External cardboard sleeve. **Temperature Range:** To +85° C. When MIL-C-62A units must be supplied, order according to specific CE type designations.

TYPE FB—INSULATED CAN CAPACITORS

C-D No.	Cap. µf	WV DC	Dia. x Lg. Inches	Net Each
FB 1005	500	10	1⅜ x 2⅜	$1.86
FB 1010	1000	10	1⅜ x 2⅜	2.13
FB 1015	1500	10	1⅜ x 2⅜	2.25
FB 1020	2000	10	1⅜ x 2⅝	2.37
FB 1030	3000	10	1⅜ x 3⅛	2.61
FB 1040	4000	10	1⅜ x 4⅛	2.85
FB 1050	5000	10	1½ x 4⅛	3.09
FB 1060	6000	10	1¾ x 4⅛	4.50
FB 1205	500	12	1⅜ x 2⅜	1.92
FB 1210	1000	12	1⅜ x 2⅜	2.25
FB 1215	1500	12	1⅜ x 2⅝	2.37
FB 1220	2000	12	1⅜ x 3⅛	2.49
FB 1225	2500	12	1⅜ x 3⅛	2.91
FB 1230	3000	12	1⅜ x 4⅛	3.03
FB 1240	4000	12	1½ x 4⅛	3.15
FB 1260	6000	12	2 x 4⅛	5.61
FB 1505	500	15	1⅜ x 2⅜	1.95
FB 1510	1000	15	1⅜ x 2⅜	2.28
FB 1515	1500	15	1⅜ x 2⅝	2.40
FB 1520	2000	15	1⅜ x 3⅛	2.82
FB 1530	3000	15	1⅜ x 4⅛	3.09
FB 1540	4000	15	1½ x 4⅛	4.86
FB 1560	6000	15	2 x 4⅛	6.00
FB 1805	500	18	1⅜ x 2⅜	1.80
FB 1810	1000	18	1⅜ x 2⅜	2.34
FB 1820	2000	18	1⅜ x 3⅛	2.94
FB 1840	4000	18	1½ x 4⅛	5.07
FB 2005	500	20	1⅜ x 2⅜	2.04
FB 2010	1000	20	1⅜ x 3⅛	2.46
FB 2020	2000	20	1⅜ x 4⅛	3.12
FB 2040	4000	20	2 x 4⅛	5.25
FB 2505	500	25	1⅜ x 2⅜	2.13
FB 2510	1000	25	1⅜ x 3⅛	2.88
FB 2520	2000	25	1⅜ x 4⅛	3.45
FB 2530	3000	25	1¾ x 4⅛	4.80
FB 2540	4000	25	2 x 4⅛	5.70
FB 2550	5000	25	2½ x 4⅛	6.60
FB 3005	500	30	1⅜ x 3⅛	2.16
FB 3010	1000	30	1⅜ x 4⅛	2.94
FB 3020	2000	30	1¾ x 4⅛	4.44
FB 3030	3000	30	2 x 4⅛	5.37
FB 3040	4000	30	2½ x 4⅛	6.30
FB 3505	500	35	1⅜ x 3⅛	2.22
FB 3510	1000	35	1⅜ x 4⅛	3.00
FB 3520	2000	35	1¾ x 4⅛	4.80
FB 3530	3000	35	2 x 4⅛	5.70
FB 3540	4000	35	2½ x 4⅛	6.60
FB 4005	500	40	1⅜ x 3⅛	2.28
FB 4010	1000	40	1⅜ x 4⅛	3.90
FB 4020	2000	40	1¾ x 4⅛	5.40
FB 4030	3000	40	2 x 4⅛	6.30
FB 4040	4000	40	2½ x 4⅛	6.90
FB 5005	500	50	1⅜ x 3⅛	2.34
FB 5010	1000	50	1⅜ x 4⅛	4.20
FB 5020	2000	50	1¾ x 4⅛	5.46
FB 5030	3000	50	2 x 4⅛	6.90
FB 5040	4000	50	2½ x 4⅛	7.50

COMPACT METALLIZED PAPER CAPACITORS

Extra-long service life. **"PUP"** units hav bare wire leads securely anchored in meta end-caps, wax-impregnated and dip-sealed against humidity. All units are extende foil—non-inductive wound for low impedance at high frequencies, low power facto and small capacity change with temperature and life. **"METAPUPS"** are one-piec metal tubular cased, pressure sealed b spin-over on synthetic rubber gaskets **"SEALPUPS"** are designed for smalles size and positive seal against moisture

"PUP" METAL END-CAP TUBULARS

Temperature Range: −40° C. to +60° C

C-D No.	Cap., µf	W V DC	Dia. x Lgth Inches	Net Each
MP 2S5	.05	200	⅜ x ⅝	$0.45
MP 2P1	.1	200	⅜ x ⅝	.47
MP 2P25	.25	200	15/32 x ⅝	.68
MP 2P5	.5	200	15/32 x 1⅛	.80
MP 2W1	1.0	200	9/16 x 1⅛	1.07
MP 2W2	2.0	200	⅝ x 1⅝	1.45
MP 4S5	.05	400	15/32 x ⅝	.47
MP 4P1	.1	400	15/32 x 1⅛	.50
MP 4P25	.25	400	9/16 x 1⅛	.75
MP 4P5	.5	400	⅝ x 1⅝	.94
MP 4W1	1.0	400	23/32 x 2⅛	1.32
MP 6S1	.01	600	⅜ x ⅝	.45
MP 6P1	.1	600	15/32 x 1⅛	.58
MP 6P25	.25	600	⅝ x 1⅛	.92
MP 6P5	.5	600	23/32 x 1⅝	1.15
MP 6W1	1.0	600	23/32 x 2⅛	1.43

"METAPUP" 1-PIECE METAL TUBULARS

Temperature Range: −55° C. to +95° C.

MTM 2S5	.05	200	⅜ x 15/16	$1.22
MTM 2P1	.1	200	7/16 x 15/16	1.27
MTM 2P25	.25	200	½ x 15/16	1.40
MTM 2P5	.5	200	½ x 1¼	1.54
MTM 2W1	1.0	200	⅝ x 1 7/16	1.80
MTM 2W2	2.0	200	⅝ x 1 15/16	2.24
MTM 4S5	.05	400	7/16 x 15/16	1.27
MTM 4P1	.1	400	7/16 x 1¼	1.35
MTM 4P25	.25	400	⅝ x 1¼	1.57
MTM 4P5	.5	400	⅝ x 1 15/16	1.79
MTM 4W1	1.0	400	¾ x 2 7/16	2.22
MTM 4W2	2.0	400	1 x 2 7/16	3.19
MTM 6S1	.01	600	⅜ x 15/16	1.36
MTM 6P1	.1	600	½ x 1 7/16	1.40
MTM 6P25	.25	600	⅝ x 1 9/16	1.73
MTM 6P5	.5	600	¾ x 1 15/16	1.99
MTM 6W1	1.0	600	13/16 x 2 7/16	2.5
MTM 6W2	2.0	600	1¼ x 2 7/16	3.66

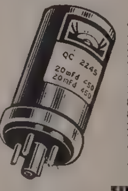
"SEALPUP" GLASS-METAL TUBULARS

Temperature Range: −55° C. to +95° C

MTW 2S5	.05	200	.235 x ¾	$1.46
MTW 2P1	.1	200	.312 x ¾	1.57
MTW 2P25	.25	200	.312 x 1 1/16	1.66
MTW 2P5	.5	200	400 x 1 1/16	1.82
MTW 2W1	1.0	200	.562 x 1¼	1.96
MTW 2W15	1.5	200	.562 x 1¾	2.77
MTW 2W2	2.0	200	.562 x 1¾	2.77
MTW 4S5	.05	400	.400 x ¾	1.47
MTW 4P1	.1	400	.400 x 1 1/16	1.59
MTW 4P25	.25	400	.562 x 1 1/16	1.89
MTW 4P5	.5	400	.562 x 1¾	2.21
MTW 4W1	1.0	400	.670 x 2¼	2.39
MTW 6S1	.01	600	.312 x ¾	1.49
MTW 6P1	.1	600	.500 x 1¼	1.69
MTW 6P25	.25	600	.670 x 1⅜	1.99
MTW 6P5	.5	600	750 x 1¾	2.28
MTW 6W1	1.0	600	.750 x 2¼	2.55

*Prices are for Style "A" ungrounded. Fo basic grounded style deduct **6c** from ne **MTM** Series; **30c** from net, **MTW** Serie

PLUG-IN CAPACITORS TYPE QC



Type Q capacitors are hermetically sealed in round aluminum containers and provided with a 4-pin case mounting to be fitted standard octal tube sockets. Ground lugs furnished with all multiple-section units. Temperature range to 85° C, except +65° at 500 V.D.C.W.

SINGLES

C-D No. QC-	Cap. µf	WV DC	† Size	Net Each
1045	10	450	A	$2.43
2045	20	450	A	2.58
4045	40	450	B	2.73
8045	80	450	D	3.33
4050	40	500	B	3.00

DUALS

2215	20-20	150	A	$2.52
4415	40-40	150	A	2.64
5515	50-50	150	A	2.79
8815	80-80	150	B	3.09

115X-558

DUALS (CONT.)

C-D No. QC-	Cap. µf	WV DC	† Size	Net Each
1145	10-10	450	A	2.64
2245	20-20	450	B	3.03
3345	30-30	450	C	3.33
4445	40-40	450	D	3.54
2250	20-20	500	B	3.18

TRIPLES

22215	20-20-20	150	A	$2.91
44415	40-40-40	150	B	3.06
11145	10-10-10	450	A	3.06
22245	20-20-20	450	C	3.66
4245C	40-20/20	450/25	C	3.60
11150	10-10-10	500	B	3.18

QUADRUPLES

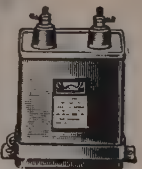
11145C	10-10-10/20	450/25	B	$3.3
33145C	30-30-10/20	450/50	E	4.1

†SIZES, INCHES

Key	Dia. x Lgth. Inches	Key	Dia. x Lgth. Inches
A	1 5/32 x 2½	D	1⅜ x 3½
B	1⅜ x 2½	E	1⅜ x 4¼
C	1⅜ x 3	.....	....

Special Purpose Capacitors

DYKANOL TRANSMITTING CAPACITORS



f Dykanol Transmitting Capacitors are dependable units for all amateur, broadcast, and commercial equipment. Provided vell insulated terminals. Thoroughly impregnated and filled)ykanol "G," a non-inflammable, fireproof, non-oxidizable compound. Light weight, small size, low dielectric stress at operating temperatures. Type **T** comes with any of three ings—designate type when ordering. Type **T** is without bracket of any kind. Type **TJH** is equipped with spade lugs, Type **TJL** ounting clamp, and Type **TJU** has mounting strap. Average ng Weight, 5 lbs. *Type **TJU** not furnished in these sizes. †Types nd **TJH** furnished with 2 mounting holes or spade lugs 3⅜" All others, single mtg. hole or spade lug centered on each brkt. **erature Range:** −55° C to +85° C. **Std. Tolerance:** ±10%.

600 V. D.C. WORKING

D .	Cap. µf	Dimen., In. H. x L. x W.	Net Each
5	.5	2⅛ x1 13/16 x1 1/16	$2.82
0	1	2⅛ x1 13/16 x1 1/16	3.48
0	2	2⅞ x1 13/16 x1 1/16	4.29
0	3	3⅞ x1 13/16 x1 1/16	4.95
0	4	3⅜ x2½ x1 3/16	5.46
0	5	4¾ x1 13/16 x1 1/16	6.27
0	6	4⅝ x2½ x1 3/16	6.78
0	8	3 13/16 x3¾ x1¼	8.10
0	10	4⅝ x3¾ x1¼	9.09

1000 V. D.C. WORKING

01	.1	2 x1 13/16 x1 1/16	$2.49
025	.25	2⅛ x1 13/16 x1 1/16	2.82
05	.5	2⅛ x1 13/16 x1 1/16	2.97
10	1	2⅛ x1 13/16 x1 1/16	3.81
20	2	4 x1 13/16 x1 1/16	4.95
30	3	3½ x2½ x1 3/16	5.79
40	4	4⅝ x2½ x1 3/16	6.27
50	5	3 13/16 x3¾ x1¼	7.59
60	6	4¾ x3¾ x1¼	8.43
80X	8	3⅞ x3¾ x1¾	9.09
00	10	4⅝ x3¾ x1¾	10.08
20	12	3 13/16 x3¾ x2¼	10.89
50	15	4¾ x3¾ x2½	12.06

1500 V. D.C. WORKING

05	.5	2⅞ x1 13/16 x1 1/16	$3.81
10X	1	3⅞ x1 13/16 x1 1/16	4.47
20X	2	4¼ x2½ x1 3/16	6.12
30	3	4¾ x2½ x1 3/16	7.44
40X	4	4¾ x3¾ x1¼	8.43
50	5	4¾ x3¾ x1¾	9.09
60	6	4¾ x3¾ x1¾	10.23
80	8	4¾ x3¾ x2½	12.54
00*	10	4¾ x3¾ x3 3/16	15.03
20*	12	4¾ x3¾ x3 3/16	16.35
50*†	15	4¾ x3¾ x4 9/16	18.00

2000 V. D.C. WORKING

01	2	4 x3¾ x1¼	$3.96
025	3	4¾ x3¾ x1¼	4.29
05	.1	2⅛ x1 13/16 x1 1/16	4.47
10	.25	2⅛ x1 13/16 x1 1/16	5.46
20	.5	2⅞ x1 13/16 x1 1/16	6.45
30	1	3⅜ x2½ x1 3/16	7.92

2000 V. D.C. WORKING (CONT.)

C-D No.	Cap. µf	Dimen., In. H. x L. x W.	Net Each
T 20040	4	3 13/16 x3¾ x2¼	9.09
T 20050	5	4¾ x3¾ x2¼	10.08
T 20060*	6	4¾ x3¾ x3 3/16	12.06
T 20080*	8	4¾ x3¾ x3 3/16	15.03
T 20100*†	10	4¾ x3¾ x4 9/16	18.33
T 20120*†	12	5⅜ x3¾ x4 9/16	19.98

2500 V. D.C. WORKING

T 25005	.5	3½ x3¾ x1¼	$ 6.93
T 25010	1	3¼ x3¾ x1¾	7.92
T 25020	2	4¾ x3¾ x1¾	12.87
T 25040*†	4	4 x3¾ x4 9/16	18.00
T 25100A*†	10	6⅜ x3¾ x4 9/16	45.06

3000 V. D.C. WORKING

T 30001	.1	2 x2½ x1 3/16	$8.43
T 300025	.25	2½ x2½ x1 3/16	8.91
T 30005	.5	3⅞ x2½ x1 3/16	10.08
T 30010	1	3 13/16 x3¾ x2¼	12.06
T 30020*	2	4⅛ x3¾ x3 3/16	15.03
T 30040*†	4	4¾ x3¾ x4 9/16	22.11

5000 V. D.C. WORKING

T 50005	.5	4¼ x3¾ x2¼	15.00
T 50010*†	1	4¼ x3¾ x4 9/16	20.40
T 50020*†	2	6 x3¾ x4 9/16	31.20

6000 V. D.C. WORKING

T 60001	.1	2¾ x3¾ x2¼	16.20
T 60010A*†	1	5 x3¾ x4 9/16	29.40

4000 V. D.C. WORKING

T 40001	.1	2¾ x3¾ x2¼	10.80
T 400025	.25	2¾ x3¾ x2¼	12.00
T 40005	.5	4 x3¾ x2¼	13.80
T 40010	1	5 x3¾ x2¼	17.40
T 40020*†	2	5 x3¾ x4 9/16	23.40
T 40040A*†	4	8 x3¾ x4 9/16	40.11

A. C. MOTOR STARTING CAPACITORS

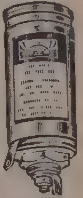
are 50-60 cps. AC. **Types ETBJ and ETWJ** (suffix **10**) are for 110 volts; **Types ETRJ** **TWJ** (suffix **25**), 125 v. Types ETBJ and ETRJ are supplied with insulated card- tubes; type ETWJ is housed in tubular, molded bakelite case. All have self-tapping terminals. (Available with end cap, ETWJ**C**, or with end cap and mount bracket, **JCB**, ETBJ**C** and ETRJ**C**. Ask for prices.) *ETRJ-170, cap. 161-180, µf, Min. to Max.

µf Max.	No. ETBJ-	Size†	Net Each	No. ETRJ-	Size†	Net Each	No. ETWJ-	Net Each	Size†	No. ETWJ-	Net Each
20	15	A	$1.23	15	A	$1.35	....	....	.....	....	.....
24	20	A	1.23	20	A	1.35	....	....	.....	....	.....
30	25	A	1.26	25	A	1.35	....	....	.....	....	.....
36	35	A	1.26	35	A	1.38	....	....	.....	....	.....
42	40	A	1.26	40	A	1.38	....	....	.....	....	.....
48	45	A	1.26	45	C	1.38	....	....	.....	....	.....
58	50	A	1.26	50	C	1.41	5010	$1.26	J	5025	$1.41
71	65	A	1.29	65	C	1.44	6510	1.29	J	6525	1.44
-88	78	B	1.38	78	C	1.56	7810	1.38	J	7825	1.56
-106	95	C	1.56	95	C	1.65	9510	1.56	J	9525	1.65
-129	110	C	1.71	110	D	1.89	11010	1.71	J	11025	1.89
-138	130	C	1.77	130	D	1.95	13010	1.77	J	13025	1.95
-156	115	D	1.77	145	D	1.95	14510	1.77	J	14525	1.95
-162	155	D	1.92	155	D	2.19	15510	1.92	J	15525	2.19
-191	170	D	1.95	170*	E	2.31	17010	1.95	K	17025	2.31
-227	210	D	2.34	210	F	2.58	21010	2.34	K	21025	2.58
-240	225	E	2.43	225	F	2.79	22510	2.43	K	22525	2.79
-270	255	E	2.82	255	F	3.12	25510	2.82	L	25525	3.12
-324	285	F	2.85	285	G	3.24	28510	2.85	L	28525	3.24
-360	340	F	3.24	340	G	3.48	34010	3.24	L	34025	3.48
-408	380	F	3.33	380	G	3.90	38010	3.33	L	38025	3.90
-420	400	F	3.60	400	G	4.05	40010	3.60	L	40025	4.05
-480	440	G	3.63	440	G	4.11	44010	3.63	L	44025	4.11
-540	500	G	4.17	500	G	5.37	50010	4.17	M	50025	5.37
-600	575	G	4.62	575	H	5.79	57510	4.62	M	57525	5.79
-700	650	G	4.98	650	H	6.24	65010	4.98	M	65025	6.24
-720	675	H	5.34	....	.....	.....	....	....	.....	....	.....

†SIZE, INCHES

	Dia. x Length	Key	Dia. x Length	Key	Dia. x Length	Key	Dia. x Length
	1 x 2⅛	D	1⅜ x 2⅝	G	1¾ x 4⅛	K	1 7/16 x 3⅜
	1 x 2⅝	E	1⅜ x 3⅛	H	2 x 4⅛	L	1 13/16 x 3⅜
	1⅛ x 2⅝	F	1⅜ x 4⅛	J	1 7/16 x 2¾	M	1 13/16 x 4⅜

DYKANOL THREADED NECK CAPACITORS



Type TLA—Dynakol Threaded Neck Capacitors are thoroughly impregnated and filled with Dynakol "G", a non-flammable, fireproof, non-oxidizing liquid compound which provides a high factor of safety and an exceptionally long life. **Temperature Range:** −55° C to +85° C. **Standard Tolerance:** +20%, −10%.

C-D No.	Cap., µf	D.C.W. Volts	Size †	Net Each
TLA 6020	2	600	A	$2.76
TLA 6040	4	600	B	3.78
TLA 10010	1	1000	A	2.52
TLA 10020	2	1000	B	3.27
TLA 15005	.5	1500	A	3.00
TLA 15010	1	1500	B	3.27

†**Size:** A—2⅞" x 1½"; B—4½" x 1½".

TYPE TNAD CAPACITORS

These capacitors same as TLA except that they contain two solder lug terminals insulated from case.

C-D No.	Cap., µf	D.C.W. Volts	Size †	Net Each
TNAD 6020	2	600	A	$3.24
TNAD 6040	4	600	B	4.26
TNAD 10010	1	1000	A	3.00
TNAD 10020	2	1000	B	3.78
TNAD 15005	.5	1500	A	3.51
TNAD 15010	1	1500	B	3.78

†**Size:** A—2⅞" x 1½"; B—4½" x 1½".

TYPES YAT AND YAB

YAT-605S
2X.5 MFD
600VDC

YAT

YAB-605S
2X.5 MFD
600VDC

YAB

DYKANOL "G"
Impregnated and Filled Units

Types YAT and YAB are impregnated and filled with Dykanol "G" (chlorinated diphenyl) a synthetic, non-inflammable, non-oxidizable liquid compound. They are especially suited for use in bypass, audio frequency coupling circuits and other applications. Units are sealed in drawn metal shell containers and provided with leak-proof terminals either on top (Type YAT) or on bottom (Type YAB). They meet MIL-C-25A performance and test requirements. **Temperature Range:** −55° C. to +85° C. **Standard Tolerance:** +20%, −10%.

600 VOLTS D.C.W.

C-D No.	Cap., µf	†	Net
YAT or YAB 6005	.05	A	$2.16
YAT or YAB 6010	.1	A	2.16
YAT or YAB 6025	.25	B	2.31
YAT or YAB 6050X	.5	C	2.49
YAT or YAB 6100	1.0	D	2.82
YAT or YAB 60055	.05-.05	A	2.19
YAT or YAB 6011	.1-.1	B	2.82
YAT or YAB 6022X	.25-.25	C	2.82
YAT or YAB 6055	.5-.5	D	3.30
YAT or YAB 60555	.05-.05-.05	A	3.15
YAT or YAB 6111	.1-.1-.1	B	3.30
YAT or YAB 6222	.25-.25-.25	D	3.48

1000 VOLTS D.C.W.

YAT or YAB 10005	.05	A	$2.22
YAT or YAB 10010	.1	A	2.40
YAT or YAB 10025X	.25	C	2.49
YAT or YAB 10050	.5	D	2.64
YAT or YAB 100055	.05-.05	A	2.64
YAT or YAB 10011	.1-.1	B	2.97
YAT or YAB 10022	.25-.25	D	3.15
YAT or YAB 100555	.05-.05-.05	B	3.48
YAT or YAB 10111	.1-.1-.1	D	3.81

†SIZES, INCHES

A	1¾ x 9/16 x 1 1/16	C	1¾ x 9/16 x 2
B	1¾ x 9/16 x 1½	D	1¾ x 9/16 x 2½

197-59A

Special Purpose Capacitors

MEDIUM POWER BAKELITE-CASED MICA CAPACITORS

Plastic cased capacitors for a wide variety of radio frequency applications where size and weight are essential. **Features:** Special series-section mica stack; stacks permanently held under pressure with non-magnetic clamps; stack vacuum-impregnated; completely soldered foils; non-turnable plated brass stud terminals; sections individually tested for capacity and voltage; special low-loss filter; fine India Ruby mica dielectric; low-loss plastic case.

TYPE 6

Case: 1 13/16" h. x 1¾" d. x 3⅛" w. (overall). Two cast-on lugs, 5/16" thick, with 3/16" holes. Two 10-32 posts, 7/16" h.

C-D No.	Cap., µf	Test Volts*	Amp.†	Net Each
390-6	.00005	5,000	1.5	$10.38
362-6	.0000625	5,000	1.8	10.38
321-6	.0001	5,000	2.4	10.38
395-6	.00015	5,000	3.7	10.38
387-6	.0002	5,000	3.6	10.38
364-6	.00025	5,000	5.0	10.38
294A-6	.0003	5,000	3.9	10.38
283-6	.0004	5,000	4.3	10.38
272-6	.0005	5,000	4.7	10.38
266-6	.0006	5,000	5.1	10.38
654-6	.00075	5,000	5.6	10.38
599-6	.0008	5,000	6.0	10.38
246-6	.001	5,000	6.2	10.38
234-6	.0015	5,000	6.8	10.38
215-6	.002	3,000	6.0	10.38
217-6	.002	6,000	9.0	10.38
473-6	.0025	5,000	9.0	10.38
197-6	.003	3,000	8.2	10.38
184-6	.004	3,000	9.1	10.38
173-6	.005	2,000	8.0	10.38
474-6	.005	3,000	9.1	10.38
565-6	.0075	2,000	10.0	10.38
476-6	.008	2,000	11.0	10.38
162-6	.008	3,000	10.0	10.38
151-6	.01	2,000	11.0	10.38
140-6	.015	1,500	12.0	10.38
784-6	.015	2,000	12.0	10.38
131-6	.02	2,000	13.0	10.38
479-6	.03	2,000	14.0§	10.38
480-6	.04	1,500	15.0§	10.38
118-6	.05	1,500	15.0§	10.38
111-6	.1	500	15.0§	11.52
486-6	.1	1,000	18.0§	10.38
110-6	.1—.1	250	20.0	10.38
105-6	.2	250	18.0§	15.15
885-6	.25	250	18.0§	16.74

TYPE 15

Case: 1½" h. x 15/16" d. x 2 13/16" w. (overall). Two cast-on lugs, ¼" thick, with 5/32" holes. Two 8-32 posts, 7/16" h.

C-D No.	Cap., µf	Test Volts*	Amps.†	Net Each
639-15	.00005	3,000	1.3	$7.56
583A-15	.0001	3,000	1.8	7.56
657-15	.00015	3,000	2.2	7.56
582A-15	.0002	3,000	2.4	7.56
805-15	.00025	3,000	3.0	7.56
640A-15	.0003	3,000	3.0	7.56
641-15	.0004	3,000	4.0	7.56
642-15	.0005	3,000	4.0	7.56
643-15	.0006	3,000	4.5	7.56
727-15	.0008	3,000	4.5	7.56
581B-15	.001	3,000	4.7	7.56
679-15	.0015	3,000	5.6	7.56
726-15	.002	3,000	6.2	7.56
645-15	.003	3,000	7.5	7.56
699-15	.004	3,000	8.2	7.56
725-15	.005	3,000	8.5	7.56
580-15	.006	2,000	9.1	7.56
724-15	.008	1,500	10.0	7.56
677-15	.01	1,000	10.0	7.56
723-15	.02	1,000	11.0	8.58
722-15	.05	500	11.0	8.58
721-15	.1	250	11.0	9.06

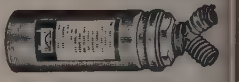
TYPE 30B

Case: 2⅞" h. x 2⅜" d. x 4" (overall). Three cast-on holes, 5/16" thick, with 17/64" holes. Two 14-24 posts, 1" h.

C-D No.	Cap., µf	Test Volts*	Amps. †	Net Each
533-30B	.0001	4,000	#	$21.15
959-30B	.0005	8,000	8.5	21.15
960-30B	.001	8,000	10.0	23.55
961-30B	.002	8,000	11.0	23.55
759-30B	.003	8,000	12.0§	25.35
757-30B	.004	8,000	12.0§	26.76
758-30B	.005	8,000	13.0§	29.16
756-30B	.006	6,000	15.0	29.16
962-30B	.01	6,000	16.0§	31.53
915-30B	.01	8,000	17.0§	33.12
963-30B	.02	5,000	18.0§	33.12
741-30B	.03	4,000	18.0§	33.12
113-30B	.1	2,000	18.0§	29.16
603-30B	.2	600	18.0§	23.55
750-30B	.25	600	18.0§	26.76
933-30B	.3	600	18.0§	26.76
898-30B	1.0	600	18.0§	49.11

*Effective. †Maximum operating current at 3 Mc. §Slightly higher at 1 Mc. #20 amps. at 60 Mc; 3 amps. at 4 Mc.

ROUND CAN ELECTROLYTICS



TYPE KR

Type KR single-hole mounting units a compact etched foil type dry electroly capacitors furnished in round (invert mounting) aluminum cans. Available single, dual and triple sections with col coded leads. Metal threaded neck. **Te perature Range:** To +65° C.

C-D No.	Cap., µf	D.C. W.V.	Size, In. Dia. x Lgth	Ne Ea
KR 508	8	450	1 x 2½	$1.
KR 520	20	450	1⅜ x 2½	1.
KR 540	40	450	1⅜ x 4⅜	1.
KR 604C	4	600	1⅜ x 3½	1.
KR 608C	8	600	1⅜ x 4⅜	1.
KR 616C	16	600	1⅜ x 4⅜	2.

SEPARATE SECTION UNITS

C-D No.	Cap., µf	D.C. W.V.	Size, In. Dia. x Lgth	N E
KR 588A	8-8	450	1⅜ x 3	$2.
KR 5888A	8-8-8	450	1⅜ x 4½	3.

TYPE WR

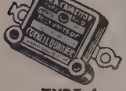
Replacements for wet electrolytics. Sim to Type KR in appearance, but w threaded neck, lock washer and rive terminal lug instead of leads. **DC Work Volts:** 500. **Temperature Range:** +65° C.

C-D No.	Cap., µf	Replacement For	Ne Ead
WR 10*	10	4 to 12 µf	$1.
WR 20*	20	16 to 20 µf	1.
WR 30†	30	20 to 30 µf	1.
WR 40†	40	30 to 40 µf	1.

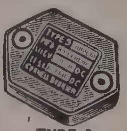
*1⅜" dia. x 2½" long. †1⅜" dia. x 3¼" lo

WRITE FOR PRICES AND SPEC
FICATIONS ON ANY UNLIST
CAPACITORS.

LOW-POWER MOLDED MICA CAPACITORS



TYPE 4



TYPE 9

For use in power amplifiers and low-power transmitters; principally used for grid and plate blocking and R.F. bypass. Molded, low-loss bakelite; salt-water immersion seal. **Type 4:** 1⅝" x 1⅛" (overall) x 11/16" thick (except as otherwise indicated). Two .144" cast-on holes; two .173" lug holes. **Type 9:** 1¾" x 1¾" (overall) x ¼" thick (except as otherwise indicated). Two 6-32 tapped holes. **Tolerances:** Type 4, ±10% standard; for tolerance of ±5% add **9c** to net price; for tolerance of ±2% add **24c** to net price. Type 9, ±10% standard; other tolerances available as for type 4.

TYPE 4

5000 VDC TEST
2500 VDC WORKING

C-D No.	Cap., µf	Net Ea.
4-54050	.00005	$1.14
4-53010	.0001	1.14
4-53020	.0002	1.14
4-53025	.00025	1.32
4-53030	.0003	1.35
4-53050	.0005	1.50
4-52010	.001	1.68
4-52015	.0015	2.13
4-52020*	.002	2.49
4-52025*	.0025	2.70
4-52030*	.003	2.94
4-52040*	.004	3.39
4-52050*	.005	3.84

*Type 4: ¼" thick.

2500 VDC TEST
1200 VDC WORKING

C-D No.	Cap., µf	Net Ea.
4-24050	.00005	$0.96
4-23010	.0001	.96
4-23020	.0002	.96
4-23025	.00025	.96
4-23030	.0003	.96
4-23050	.0005	.96
4-22010	.001	1.08
4-22015	.0015	1.38
4-22020	.002	1.44
4-22025	.0025	1.68
4-22030	.003	1.83
4-22040*	.004	1.83
4-22050*	.005	1.98
4-22060*	.006	1.98
4-22080*	.008	2.31
4-21010*	.01	3.06

1200 VDC TEST
600 VDC WORKING

C-D No.	Cap., µf	Net Ea.
4-14050	.00005	$0.72
4-13010	.0001	.72
4-13020	.0002	.72
4-13025	.00025	.72
4-13030	.0003	.72
4-13040	.0004	.72
4-13050	.0005	.72
4-12010	.001	.72
4-12015	.0015	.72
4-12020	.002	.78
4-12025	.0025	.78
4-12030	.003	.87
4-12040	.004	.90
4-12050	.005	.93
4-12060	.006	1.08
4-12070	.007	1.11
4-12080	.008	1.14
4-11010	.01	1.29
4-11015*	.015	1.59
4-11020*	.02	1.83
4-11025*	.025	2.16
4-11030*	.03	2.67

TYPE 9

5000 VDC TEST
2500 VDC WORKING

9-54050	.00005	$1.14
9-53010	.0001	1.14
9-53025	.00025	1.29
9-53050	.0005	1.53
9-52010	.001	1.74
9-52020	.002	2.55
9-52025	.0025	2.76
9-52030	.003	3.06
9-52040	.004	3.39
9-52050*	.005	3.72
9-52060*	.006	3.81
9-52080*	.008	4.11
9-51010*	.01	4.38
9-51015*	.015	4.83

*Type 9: 47/64" thick.

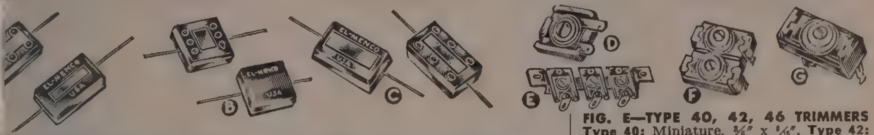
1200 VDC TEST
600 VDC WORKING

C-D No.	Cap., µf	Net
9-14050	.00005	$0.
9-13010	.0001	.
9-13025	.00025	.
9-13050	.0005	.
9-12010	.001	.
9-12020	.002	.
9-12025	.0025	1.
9-12030	.003	1.
9-12040	.004	1.
9-12050	.005	1.
9-12060	.006	1.
9-12080	.008	1.
9-11010	.01	1.
9-11015	.015	1.
9-11020	.02	2.
9-11025	.025	2.
9-11030	.030	2.
9-11040*	.04	3.
9-11050*	.05	4.
9-11060*	.06	4.

2500 VDC TEST
1200 VDC WORKING

9-24050	.00005	$0.
9-23010	.0001	
9-23025	.00025	
9-23050	.0005	
9-22010	.001	1.
9-22020	.002	1.
9-22025	.0025	1.
9-22030	.003	1.
9-22040	.004	1.
9-22050	.005	1.
9-22060	.006	2.
9-22080	.008	2.
9-21010	.01	2.
9-21015*	.015	3.
9-21020*	.02	4.
9-21025*	.025	4.
9-21030*	.03	4.

menco MIL-C-5B Mica Capacitors



A—TYPE CM-15—500 WVDC

uf: 9/32″ x ½″ x 3/16″. 301-510 µµf: ″ x 7/32″. Silvered mica only.

enco o.#	Cap. µµf	WV DC	Net Each
5-C-010†	1	500	$0.24
5-C-020†	2	500	.24
5-C-030†	3	500	.24
5-C-050†	5	500	.24
5-C-100	10	500	.24
5-C-120	12	500	.24
5-C-150	15	500	.24
5-C-180	18	500	.24
5-C-200	20	500	.24
5-C-220	22	500	.24
5-E-240	24	500	.24
5-E-270	27	500	.24
5-E-300	30	500	.24
5-E-330	33	500	.24
5-E-360	36	500	.24
5-E-390	39	500	.24
5-E-430	43	500	.24
5-E-470	47	500	.24
5-E-500	50	500	.24
5-E-510	51	500	.24
5-E-560	56	500	.24
5-E-620	62	500	.24
5-E-680	68	500	.24
5-E-750	75	500	.24
5-E-820	82	500	.27
5-E-910	91	500	.27
5-E-101	100	500	.27
5-E-111	110	500	.27
5-E-121	120	500	.27
5-E-131	130	500	.27
5-E-151	150	500	.27
5-E-161	160	500	.30
5-E-181	180	500	.30
5-E-201	200	500	.30
5-E-221	220	500	.33
5-E-241	240	500	.33
5-E-251	250	500	.33
5-E-271	270	500	.36
5-E-301	300	500	.36
5-E-331	330	500	.39
5-E-361	360	500	.42
5-E-391	390	500	.42
5-E-431	430	300	.45
5-E-471	470	300	.48
5-E-501	500	300	.48
5-E-511	510	300	.48

µµf. Balance, ±5%. #Available in F.

A—TYPE CM-20—500 WVDC

25/32″ x 7/16″ x 7/32″

enco o.†	Cap. µµf	Net Each**	
		Foil	Silvered
-050	5	$0.18	$0.24
-100	10	.18	.24
-120	12	.18	.24
-150	15	.18	.24
-180	18	.18	.24
-200	20	.18	.24
-220	22	.18	.24
-240	24	.18	.24
-270	27	.18	.24
-300	30	.18	.24
-330	33	.12	.24
-360	36	.12	.24
-390	39	.12	.24
-430	43	.12	.24
-470	47	.12	.24
-500	50	.12	.24
-510	51	.12	.24
-560	56	.12	.24
-620	62	.12	.24
-680	68	.12	.24
-750	75	.12	.24
-820	82	.12	.24
-910	91	.12	.24
-101	100	.12	.24
-111	110	.12	.27
-121	120	.12	.27
-131	130	.15	.27
-151	150	.15	.27
-161	160	.15	.27
-181	180	.15	.27
-201	200	.15	.27
-221	220	.15	.27
-241	240	.18	.33
-251	250	.18	.33
-271	270	.18	.33
-301	300	.18	.33
-331	330	.18	.33
-361	360	.18	.33
-391	390	.18	.39
-431	430	.18	.39

rances: Foil, ±20%; silvered, ±5%.

TYPE CM-20—(CONT'D)

Elmenco No.†	Cap. µµf	Net Each**	
		Foil	Silvered
CM-20-471	470	$0.18	$0.42
CM-20-501	500	.18	.42
CM-20-511	510	.18	.42
CM-20-561	560	.21	.45
CM-20-621	620	.21	.45
CM-20-681	680	.21	.48
CM-20-751	750	.21	.48
CM-20-821	820	.24	.51
CM-20-911	910	.27	.51
CM-20-102	1000	.27	.54
CM-20-112	1100	.30	.54
CM-20-122	1200	.30	.60
CM-20-132	1300	.30	.60
CM-20-152	1500	.36	.66
CM-20-162	1600	.36	.66
CM-20-182	1800	.42	.72
CM-20-202	2000	.45	.78

†Available in B, C, D, E or F.

FIG. B—TYPE CM-30—500 WVDC

13/16″ x 13/16″ x 9/32″

Elmenco No.‡	Cap. µµf	Net Each**	
		Foil	Silvered
CM-30-E-511	510	$0.18	$0.42
CM-30-E-561	560	.18	.45
CM-30-E-621	620	.18	.45
CM-30-E-681	680	.18	.48
CM-30-E-751	750	.18	.48
CM-30-E-821	820	.18	.51
CM-30-E-911	910	.18	.54
CM-30-E-102	1000	.21	.60
CM-30-E-112	1100	.21	.60
CM-30-E-122	1200	.21	.69
CM-30-E-132	1300	.21	.69
CM-30-E-152	1500	.24	.75
CM-30-E-162	1600	.24	.75
CM-30-E-182	1800	.27	.75
CM-30-E-202	2000	.27	.81
CM-30-E-222	2200	.27	.81
CM-30-E-242	2400	.30	.96
CM-30-E-252	2500	.30	.96
CM-30-E-272	2700	.30	1.08
CM-30-E-302	3000	.36	1.14
CM-30-E-332	3300	.36	1.14
CM-30-E-362	3600	.36	1.20
CM-30-E-392	3900	.39	1.20
CM-30-E-432	4300	.39	1.26
CM-30-E-472	4700	.39	1.26
CM-30-E-502	5000	.42	1.29
CM-30-E-512	5100	.42	1.29
CM-30-E-562	5600	.42	1.35
CM-30-E-622	6200	.54	1.44

FIG. B—TYPE CM-35—300 WVDC

13/16″ x 13/16″ x 11/32″

CM-35-E-682	6800	$0.57	$1.59
CM-35-E-752	7500	.60	1.68
CM-35-E-822	8200	.69	1.80
CM-35-E-912	9100	.69	1.92
CM-35-E-103	10000	.84	2.10
CM-35-E-123	12000	.96	2.55
CM-35-E-153	15000	1.20	3.00
VCM-35-E-682*	6800	.63	1.74
VCM-35-E-752*	7500	.69	1.83
VCM-35-E-822*	8200	.78	1.98
VCM-35-E-912*	9100	.78	2.10
VCM-35-E-103*	10000	.93	2.31

*500 WVDC.

FIG. C—TYPE CM-40—500 WVDC

1″ x 5/8″ x 11/64″

CM-40-E-272	2700	$0.33	$1.14
CM-40-E-302	3000	.36	1.23
CM-40-E-332	3300	.39	1.23
CM-40-E-362	3600	.42	1.26
CM-40-E-392	3900	.45	1.29
CM-40-E-432	4300	.48	1.29
CM-40-E-472	4700	.51	1.29
CM-40-E-502	5000	.54	1.35
CM-40-E-512	5100	.54	1.35
CM-40-E-562	5600	.60	1.50
CM-40-E-622	6200	.63	1.74
CM-40-E-682	6800	.69	1.98
CM-40-E-752	7500	.78	2.19
CM-40-E-822	8200	.84	2.31
CM-40-E-912*	9100	.78	2.40
CM-40-E-103*	10000	.90	2.40
VCM-40-E-912	9100	.96	2.64
VCM-40-E-103	10000	1.02	2.64

*300 WVDC.

‡Silvered numbers; for Foil insert **-B-**.

Characteristics: (Temperature Coefficient and Capacitance Drift). **A:** EIA ±1000; ±(5% +1 µµf). **B:** EIA ±500; ±(3% +1 µµf); **C:** ±200; ±0.5%. **D:** ±100; ±0.3%. **E:** −20 to +100; ±(0.1% +0.1 µµf). **F:** 0 to +70; ±(0.05% +0.1 µµf).

FIG. E—TYPE 40, 42, 46 TRIMMERS

Type 40: Miniature, 3/8″ x 9/16″. **Type 42:** Midget, 3/8″ x 3/4″. **Type 46:** Standard, 3/4″ x 5/8″. India Ruby mica. Ceramic base.

175 WVDC, 350 VDCT

Elmen. No.	Plates	Range µµf	Net
400	1⅛	7-0.9	$0.24
402	2	20-1.5	.27
403	3	35-3	.30
404	4	60-8	.33
420	1⅛	12-1	.24
421	1¾	25-2	.24
422	2	40-4	.27
423	3	100-7	.30
424	4	150-14	.33
425	5	200-24	.36
426	6	250-37	.39
427	7	300-55	.45
428	8	350-70	.48
429	9	400-90	.51
460	1¼	15-1.5	.24
461	1¾	30-2.7	.24
462	2	80-5	.27
463	3	180-9	.30
464	4	280-25	.33
465	5	380-50	.36
466	6	480-80	.39
467	7	580-110	.45
468	8	680-140	.48
469	9	780-170	.51

PADDERS—TYPES 30,30-M,50,58,60

Type 30, 30-M (Fig. D): 7/8″ x 15/16″. "30" is 250 WVDC, "30-M", 500 WVDC. **Type 58 (Fig. F):** Single var. trimmer sec. **Type 50 and 60 (Fig. F and G):** Duals, tuning components on IF Transformers. "50" fits shield 1 1/16″ sq. or larger; "60", 3/4″ sq. or larger. India Ruby mica, steatite base.

Elmen.No.	Plates	Range µµf	Net
302	2	130-15	$0.48
303	3	340-65	.51
304	4	550-100	.54
305	5	760-190	.60
306	6	970-275	.66
307	7	1180-350	.72
308	8	1390-450	.75
309	9	1600-550	.81
310	10	1890-650	.87
311	11	2110-780	.93
312	12	2330-880	.99
313	13	2605-1150	1.05
314	14	2830-1300	1.11
315	15	3055-1400	1.17
302-M	2	120-15	.48
303-M	3	320-65	.54
304-M	4	500-100	.57
305-M	5	690-180	.63
306-M	6	880-265	.69
307-M	7	1070-340	.75
308-M	8	1260-425	.78
309-M	9	1415-525	.84
310-M	10	1600-615	.90
311-M	11	1785-730	.96
312-M	12	1970-800	1.02
313-M	13	2155-1000	1.08
314-M	14	2340-1100	1.14
315-M	15	2525-1200	1.20
582	2	80-7.5	.33
583	3	160-19	.36
584	4	240-50	.39
502	2	80-7.5	.51
503	3	160-19	.60
504	4	240-50	.69
602	2	55-7	.48
603	3	100-15	.57
604	4	160-35	.66
605	5	220-60	.75

Note: Type 30 (300 series) or Type 30-M (300-M series) padders are available with special adjusting screw to accommodate a tuning knob. To order one of these padders with screw, prefix the padder part number with letter **"L"** and add **6c** to the net price.

Type 46 Trimmer assembly with mounting bracket and adjusting shaft for ease of tuning is also available. Order by adding the prefix **"S"** to the trimmer part number and add **27c** to the net price. Type 46 also available as a printed circuit trimmer. Prefix "PC" and add **3c** to price.

KITS

Type 30 Padder Kit—Contains 12 units of each value. Net Each.................... $117⁰⁰

Type 46 Trimmer Kit—Contains 24 each of Type 46 trimmers listed. Weight, 10 lbs. Net Each...... $72⁰⁰

Industrial Capacitors

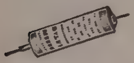
AEROLITE TYPE P-82Z

AEROVOX
AEROLITE
METALLIZED PAPER

Type P-82Z metallized capacitors were developed for reliability and reduced size. Hyvol K impregnated in humidity-resistant wax cardboard cases. Operating temperature −40° C to +50° C without deration, with operating at ambient temperatures up to 70° C with voltage derating to 85%. Standard tolerance ±20%. For ±10% tolerance add **6c** to price; ±5% on special order.

Cap., µf	200 VDC Size, In.	Net Each	400 VDC Size, In.	Net Each	600 VDC Size, In.	Net Each
.01	⅜x ⅝	$0.43	⅜x ⅝	$0.43	⅜x ⅝	$0.45
.02	⅜x ⅝	.43	⅜x ⅝	.45	⅜x ⅝	.47
.03	⅜x ⅝	.45	⅜x ⅝	.45	15/32x ⅝	.50
.05	⅜x ⅝	.45	15/32x ⅝	.47	15/32x ⅝	.53
.1	⅜x ⅝	.47	15/32x1⅛	.50	15/32x1⅛	.58
.25	15/32x ⅝	.68	9/16x1⅛	.75	⅝x1⅛	.92
.5	15/32x1⅛	.80	⅝x1⅝	.95	23/32x1⅝	1.15
1.0	9/16x1⅛	1.07	23/32x2⅛	1.32	23/32x2⅝	1.43
2.0	⅝x1⅝	1.45	....	....	....	....

TYPE SRE BANTAM ELECTROLYTICS

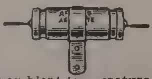


Metal Tubular Electrolytic Capacitors. These tiny capacitors handle full loads. Hermetically sealed in aluminum can; furnished with cardboard insulating sleeve. Negative grounded to can.

Cap. µf	3 V. Size, In.	3 V. Net	6 V. Size, In.	6 V. Net	12 V. Size, In.	12 V. Net	15 V. Size, In.	15 V. Net
5	....	....	⅜x1	48c	....	....	....	....
25	⅜x1	51c	⅜x1	51c	....	....	....	....
50	⅜x1	57c	⅜x1	57c	⅜x1⅛	60c	....	....
100	⅜x1	66c	½x1⅛	72c	½x1	72c	½x1⅛	75c
200	⅜x1⅝	69c	....	....	½x1⅝	81c	....	....
250	....	....	½x1⅛	81c	....	....	....	....
300	½x1⅛	78c	....	....	....	....	....	....
500	½x1⅝	84c	....	....	....	....	....	....

Cap. µf	25 V. Size, In.	25 V. Net	50 V. Size, In.	50 V. Net	70 V. Size, In.	70 V. Net	150 V. Size, In.	150 V. Net
1	....	....	⅜x1	54c	....	....	....	....
2	....	....	⅜x1	54c	....	....	....	....
5	⅜x1	60c	⅜x1	60c	....	....	⅜x1	60c
10	⅜x1	60c	⅜x1	60c	⅜x1	63c	⅜x1⅝	63c
15	....	....	⅜x1⅛	60c	....	....	½x1⅛	69c
20	⅜x1	60c	....	....	....	....	½x1⅝	72c
25	⅜x1	60c	½x1	63c	....	....	½x1⅝	75c
50	½x1	66c	....	....	....	....	....	....
100	½x1⅝	81c	....	....	....	....	....	....

AEROLITE TYPE P89ZXY



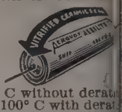
Type P89ZXY metallized capacitors were developed to meet the present requirements for capacitors of improved reliability and reduced size. Hyvol K or M impregnated, in hermetically sealed metal cases. Operating temperatures are −55° C to +70° C without derating, with operation at ambient temperature up to 95° C with voltage derating. Power factor of **Aerolite** capacitors less than 1% when measured at or referred to a frequency of 1000 cps and at an ambient temperature of 25° C. Life test 1000 hours at 1.25 times the derated voltage in an ambient temperature of 85° C. Standard tolerance ±20%. Supplied without insulating tube and bracket.

Cap. µf	150 v. DC Size In.	Net Ea.	200 v. DC Size In.	Net Ea.	400 v. DC Size In.	Net Ea.	600 v. DC Size In.	Net Ea.
.01	....	......	....	......	....	......	⅜x1	$1.30
.02	....	......	....	......	....	......	⅜x1	1.30
.03	....	......	....	......	⅜x1	$1.27	7/16x1	1.30
.05	....	......	⅜x1	$1.22	7/16x1	1.27	½x1	1.35
.1	....	......	7/16x1	1.27	7/16x1 5/16	1.35	½x1½	1.40
.25	....	......	½x1	1.40	⅝x1 5/16	1.57	⅝x1⅝	1.73
.5	....	......	½x1 5/16	1.53	⅝x2	1.75	¾x2	1.95
1.0	....	......	⅝x1½	1.82	¾x2½	2.22	13/16x2½	2.55
2.0	....	......	⅝x2	2.23	1 x2½	3.18	1¼x2½	3.67
3.0	¾x2	$2.97	....	......	....	......	....	......
4.0	13/16x2	3.52	....	......	....	......	....	......
6.0	1 x2	4.62	....	......	....	......	....	......

Sizes shown in inches are for floating case without insulating tube. For grounded section, uninsulated case, deduct 3/16" from lengths specified and add G to type designation; (Example, 89ZGXY). For plastic insulating tube, add 1/16" to length and diameter and replace Y type designation with P; (Example, 89ZXP). For cardboard insulating tube, add 1/16" to diameter, 1/16" to length and omit Y in type designation; (Example, 89ZX). For mounting bracket, omit X in type designation; (Example, 89ZY). Write for prices.

PLEASE WRITE FOR PRICES AND SPECIFICATIONS ON ANY UNLISTED STANDARD OR SPECIAL PURPOSE CAPACITORS YOU NEED.

AEROLITE TYPE P123ZG MICROMINIATURES



Type P123ZG Aerolites are metallized-paper capacitors, Hyvol K or M impregnated in non-magnetic metal cases with vitrified ceramic terminal seals. Cases and capacitor section are of a design enabling maximum efficiency of container volume. Operating temperatures are −55° C to +70° C without derat
with operation at ambient temperature up to 100° C with derat
to 75%. Power factor of Aerolite capacitors is less than 1% w
measured at or referred to a frequency of 1000 cps and an amb
temperature of 25° C. Type P123ZG is section grounded to c
non-insulated case style. For insulated section (insulating term
at both ends), omit G in type designation, add 1/16" to length
38c to net. For plastic insulating sleeve, add P to type designat
.062" to diameter, 1/16" to length and **10c** to net. Standard tolera
.01 µf and lower, ±25%; .015 µf and up, ±20%. For ±10% to
ance, add **23c** to price; ±5% on special order.

Cap., µf	200 VDC Size, In.	Net Each	400 VDC Size, In.	Net Each	600 VDC Size, In.	Ne Ea
.0005	.175x7/16	$0.97	.235x7/16	$1.02	.235x7/16	$1.
.001	.175x7/16	.97	.235x7/16	1.02	.235x7/16	1.
.002	.175x7/16	.97	.235x7/16	1.02	.235x9/16	1.
.003	.175x7/16	.98	.235x9/16	1.03	.235x9/16	1.
.005	.175x7/16	.98	.235x9/16	1.03	.235x9/16	1.
.01	.175x7/16	1.02	.235x9/16	1.07	.312x23/32	1.
.015	.195x½	1.02	.235x23/32	1.07	.312x23/32	1.
.02	.195x½	1.02	.235x23/32	1.07	.312x23/32	1.
.022	.195x½	1.02	.312x23/32	1.08	.312x23/32	1.
.033	.235x9/16	1.03	.312x23/32	1.08	.400x23/32	1.
.040	.235x9/16	1.07	.312x23/32	1.08	.400x23/32	1.
.047	.235x23/32	1.07	.400x23/32	1.08	.400x23/32	1.
.050	.235x23/32	1.07	.400x23/32	1.08	.400x23/32	1.
.068	.312x23/32	1.10	.400x1 1/32	1.18	.400x1 1/32	1.
.10	.312x23/32	1.13	.400x1 1/32	1.20	.500x1 1/32	1.
.15	.312x1 1/32	1.15	.500x1 1/32	1.28	.500x1 1/32	1
.2	.312x1 1/32	1.15	.500x1 1/32	1.28	.562x1 7/32	1
.22	.312x1 1/32	1.15	.562x1 1/32	1.28	.562x1 7/32	1
.25	.312x1 1/32	1.27	.562x1 1/32	1.45	.562x1 11/32	1
.33	.400x1 1/32	1.27	.562x1 7/32	1.45	.562x1 23/32	1
.47	.400x1 1/32	1.37	.562x1 23/32	1.58	.670x1 23/32	1
.50	.400x1 1/32	1.43	.562x1 23/32	1.82	.670x1 23/32	1
.68	.562x1 1/32	1.43	.670x1 23/32	1.82	.670x2 7/32	2
1.00	.562x1 7/32	1.57	.670x2 7/32	1.97	.750x2 7/32	2
1.5	.562x1 23/32	2.38	....	....	....	...
2.0	.562x1 23/32	2.38	....	....	....	...

AEROLITE TYPE P123ZNG MICROMINIATURES

Similar to the Type P123ZG, with the additional feature th
will operate up to temperatures of 100° C, at full voltage ra
and 125° C with voltage derating to 75%. For insulated
specify P123ZN, and add **35c** to price and 1/16" to length. For ±
tolerance add **45c** to price; ±5% on special order.

Cap., µf	200 VDC Size, In.	Net Each	400 VDC Size, In.	Net Each	600 VDC Size, In.	N Ea
.0005	.175x7/16	$0.97	.235x7/16	$1.02	.235x7/16	$1
.001	.175x7/16	.97	.235x7/16	1.02	.235x7/16	1
.002	.175x7/16	.97	.235x7/16	1.02	.235x9/16	1
.003	.175x7/16	.98	.235x9/16	1.03	.235x9/16	1
.005	.175x7/16	.98	.235x9/16	1.03	.235x9/16	1
.01	.175x7/16	1.02	.235x9/16	1.07	.312x¾	1
.015	.195x½	1.02	.235x9/16	1.07	.312x¾	1
.02	.195x½	1.02	.235x¾	1.07	.312x¾	1
.022	.195x½	1.02	.235x¾	1.08	.312x¾	1
.033	.235x9/16	1.03	.312x¾	1.08	.400x¾	1
.040	.235x9/16	1.07	.312x¾	1.08	.400x¾	1
.047	.235x9/16	1.07	.312x¾	1.08	.400x¾	1
.050	.235x9/16	1.07	.312x¾	1.08	.400x¾	1
.068	.312x¾	1.10	.312x1 1/16	1.18	.400x1 1/16	1
.10	.312x¾	1.13	.400x1 1/16	1.20	.400x1 1/16	1
.15	.312x1 1/16	1.15	.500x1 1/16	1.28	.500x1 1/16	1
.2	.312x1 1/16	1.15	.500x1 1/16	1.28	.562x1 1/16	1
.22	.312x1 1/16	1.15	.500x1 1/16	1.28	.562x1 1/16	1
.25	.312x1 1/16	1.27	.500x1 1/16	1.45	.562x1¼	1
.33	.400x1 1/16	1.27	.562x1¼	1.45	.562x1¾	1
.47	.400x1 1/16	1.37	.562x1¾	1.58	.670x1¾	1
.50	.400x1 1/16	1.43	.562x1¾	1.82	.670x1¾	1
.68	.500x1 1/16	1.43	.670x1¾	1.82	.670x1¾	2.
1.00	.562x1 1/16	1.57	.670x2¼	1.97	.750x2¼	2.
1.50	.562x1¼	2.38	.750x2¼	2.65	1.000x1¾	2.
2.00	.562x1¾	2.38	1.000x1¾	3.16	1.000x2¼	3.

TYPE P83Z MICROMINIATURES

Type P83Z Mincrominiatures are ultra-s
new metallized-dielectric capacitors p
ularly applicable in the electronic field t
place the low capacity paper units now being used. Hyv
impregnated in humidity-resistant molded thermoplastic
The improved metallized dielectric provides both the diel
and the electrodes. Capacitance is predetermined mechanica
the initial processing. Standard tolerance ±25%.

Cap. µf	Volts DC W.	Size, In. D. x L.	Net Each	Cap. µf	Volts DC W.	Size, In. D. x L.	N Ea
.004	200	3/16x7/16	$0.21	.0005	600	3/16x7/16	$0.
.005	200	3/16x7/16	.21	.0008	600	3/16x7/16	.
.01	200	3/16x7/16	.21	.001	600	3/16x7/16	.
.02	200	¼x9/16	.27	.002	600	¼x9/16	.
.04	200	¼x9/16	.27	.0022	600	¼x9/16	.
.002	400	3/16x7/16	.21	.0047	600	¼x9/16	.
.003	400	3/16x7/16	.27	.005	600	¼x9/16	.
.008	400	¼x9/16	.27	.0068	600	¼x9/16	.
.01	400	¼x9/16	.27				

allory Tantalum Capacitors

MALLORY TANTALUM AND MINIATURE TANTALUM CAPACITORS

TYPE XT TANTALUM CAPACITORS

Applications: Geophysical, well drilling and other unlimited applications requiring rugged use and wide variations in temperature.

Description: Enclosed in a hermetically sealed steel case that will withstand 100 hours of 20% salt spray at 95° F without harmful corrosion. Case sealed with a glass-to-metal end seal. Withstand temperatures ranging from −55° C to +200° C. Standse diameter for all XT types is ⅞″; height will vary from 4 1/16″.

nals: Provided with a wrap-around terminal for easy ng.

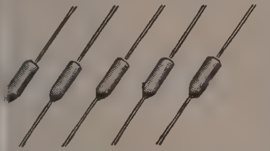
ting: Mounting hardware not supplied.

ging: Individually packed.

llory o.	Capacity, µf	DC Volts 175° C	DC Volts 85° C	Max. Ohms ESR	Max. Ohms IMP	Height, In.
20	120	12	18	2.8	45	½
40	240	12	18	2.5	35	11/16
,240	240	12	18	2.5	35	11/16
5	75	20	30	2.7	50	½
50	150	20	30	2.7	40	11/16
0	60	23	35	2.5	63	½
25	125	23	35	2.5	48	11/16
0	40	38	60	2.7	75	½
40	40	38	60	2.7	75	½
0A	40	38	60	2.7	75	½
.0	80	38	60	2.7	50	11/16
5	25	60	100	2.7	100	½
0	50	60	100	2.7	70	11/16
2	12	120	180	5.6	200	27/32
12	12	120	180	5.6	200	27/32
.5	25	120	180	5.3	140	1¼
	8	180	270	8.3	300	1 3/16
A	8	180	270	8.3	300	1 3/16
.6	16	180	270	8.3	210	1 13/16
	6	240	360	11	400	1 17/32
6	6	240	360	11	400	1 17/32
A	6	240	360	11	400	1 17/32
.2	12	240	360	11	280	2⅜
512	12	240	360	11	280	2⅜
.2A	12	240	360	11	280	2⅜
	5	300	450	13	500	1 29/32
.0	10	300	450	13	350	2 15/16
	4	360	540	16.6	600	2¼
8	8	360	540	16.6	420	3½
8A	8	360	540	16.6	420	3½
.5	3.5	420	630	18.9	700	2 19/32
7	7	420	630	18.9	490	4 1/16

on request. For screw terminal and nut, add "s" to part er. For 200° C ratings, add "X" to part number (i.e., 20 becomes XTLX120). 100% Environmental Testing ble. All at extra charge. Cathode tab can be supplied at no charge, add "A" to part number (i.e., XTL120A).

TYPE "TNT" TANTALUM CAPACITORS



Applications: Military and commercial aircraft control equipment and other miniaturized units such as hearing aids, extremely small commercial and military radios, and printed circuit package assemblies.

Description: Subminiature, polarized, tantalum, electrolytic itor. Occupies only .006 cubic inch volume.

inals: Negative lead, tinned copper wire, .0159″ diameter; ve lead, tinned Nichol wire, .0126″ diameter.

nting: By means of attached leads.

aging: Five in each plastic bag.

Mallory No.	Capacity µf	Volts DC	Size, In. Length x Dia.
TNT8-50	8	50	½ x .145
TNT15-30	15	30	½ x .145
TNT25-15	25	15	½ x .145
TNT50-6	50	6	½ x .145
TNT80-3	80	3	½ x .145

s on request.

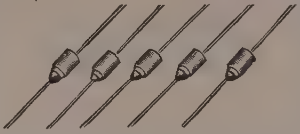
STNT SUBMINIATURE TANTALUM CAPACITORS

red pellet anode, occupies only .005 cubic inch of volume, the st capacity per unit volume available. Offers excellent shelf xtremely long, trouble-free operating life. Withstand severe onmental conditions. Temperature range, −55° C to +85° C.

Mallory No.	Capacity µf	Volts DC	Size, In. Length x Dia.
STNT2-50	2	50	5/16 x .145
STNT4-50	4	50	5/16 x .145
STNT6-35	6	35	5/16 x .145
STNT12-15	12	15	5/16 x .145
TNT25-6	25	6	5/16 x .145
STNT40-3	40	3	5/16 x .145

es on request.

TYPE TAP SILVERLYTIC CAPACITORS



Applications: For transistor applications requiring extremely small (subminiaturized) capacitors.

Description: Extremely long operational life; rugged double seal construction, "a case within a case:" excellent low temperature characteristics. Operating temperature, −55° C to +85° C. DC leakage, less than 1 µa after 10 minutes of rated voltage. Tolerance, −15% to +75%.

Terminals: Axial leads 1½″ long, tinned for easy soldering.

Mounting: Designed for mounting with attached leads.

Packaging: Five units per display carton.

Mallory No.	Capacity µf	Volts DC	Size, In. Dia. x Length
TAP90-2	2	90	7/32 x 3/8
TAP75-3.5	3.5	75	7/32 x 3/8
TAP60-4	4	60	7/32 x 3/8
TAP50-5	5	50	7/32 x 3/8
TAP40-6	6	40	7/32 x 3/8
TAP30-8	8	30	7/32 x 3/8
TAP25-10	10	25	7/32 x 3/8
TAP20-12	12	20	7/32 x 3/8
TAP15-15	15	15	7/32 x 3/8
TAP10-20	20	10	7/32 x 3/8
TAP6-30	30	6	7/32 x 3/8

Prices on request.

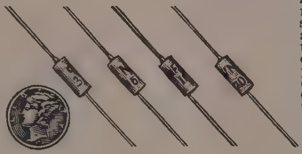
TYPE XTM MINIATURE TANTALUM CAPACITORS

Miniaturized version of the XTL-XTH series. Temperature range, −55° C to +175° C. Rugged construction; true metal-to-glass hermetic seal; corrosion-resistant case double sealed. Extremely long shelf and operating life. Axial leads are of solderable heavy wire securely bonded (not welded) to the capacitor termination, virtually eliminating broken lead connections.

Mallory No.	µf −15% +50%	Max. Working Voltage at +85° C	+125° C	+150° C	+175° C	Max. Surge Voltage at +85° C	+125° C	+150° C	+175° C	Size, In. D	H.
XTM-40	40	35	30	27	23	40	34.5	31	26	.650	9/16
XTM-25	25	60	50	48	38	69	57.5	55	44	.650	9/16
XTM-16	16	90	80	75	60	103	92	86	69	.650	9/16
XTM-8	8	170	160	150	120	196	184	173	138	.650	15/16
XTM-5	5	255	240	225	180	293	276	259	207	.650	1⅜
XTM-4	4	340	320	300	240	391	368	345	276	.650	1 25/32

Prices on request.

TAN-SOL® SOLID ELECTROLYTE TANTALUM CAPACITORS



Applications: For miniaturized or transistorized military and commercial electronic and computer equipment, battery powered radio and communications equipment subjected to extreme environmental conditions; also test equipment, radios, hearing aids, recorders, etc.

Description: Feature an extremely small tantalum anode on which is formed a tantalum oxide film. The electrolyte is a solid, semiconducting material that is not subject to corrosion or leakage. The Tan-Sol is free from corrosion or leakage even if the hermetic seal of the outer case should be broken or destroyed. Temperature range, −80° C to +85° C. **Leads:** 24 gauge, tinned nickel positive lead; tinned copper negative lead; each 1½″ long.

Mallory No.	Capacity µf	Voltage Working	Voltage Surge	Size, In. L. x D.
TAS3.3-20	3.3	20	23	.438 x .175
TAS4.7-20	4.7	20	23	.438 x .175
TAS4.7-15	4.7	15	18	.438 x .175
TAS6.8-20	6.8	20	23	.438 x .175
TAS6.8-15	6.8	15	18	.438 x .175
TAS6.8-10	6.8	10	13	.438 x .175
TAS10-20	10	20	23	.438 x .175
TAS10-15	10	15	18	.438 x .175
TAS10-10	10	10	13	.438 x .175
TAS10-6	10	6	8	.438 x .175
TAS15-20	15	20	23	.438 x .175
TAS15-15	15	15	18	.438 x .175
TAS15-10	15	10	13	.438 x .175
TAS15-6	15	6	8	.438 x .175
TAS22-15	22	15	18	.438 x .175
TAS22-10	22	10	13	.438 x .175
TAS22-6	22	6	8	.438 x .175
TAS33-10	33	10	13	.438 x .175
TAS33-6	33	6	8	.438 x .175
TAS40-10	40	10	13	.438 x .175
TAS47-6	47	6	8	.438 x .175
TAS60-6	60	6	8	.438 x .175

Prices on request.

Mallory Electrolytic Capacitors

FP AND WP CAPACITORS

For top chassis mounting in filter and audio bypass circuits and TV applications. Extremely dependable under heavy ripple current and high surge voltage. All WP and FP capacitors are designed for high temperature (85° C) operation at full rated voltage, except as noted in table by (‡). Single, dual, triple and quad section units encased in compact rubber sealed aluminum cases with self-contained mounting feature.

Type FP is supplied with Fabricated Plate (metalliz cotton gauze) anodes, **Type WP** with etched pl anodes. Special internal design provides low RF i pedance and minimum coupling between sectio Case at negative potential. Supplied insulat washer may be used where negative ground is t wanted. For twist-prong mounting through cha slots.

FP-WP—SINGLES

Mallory No.	Cap. µfd.	Wkg. V. DC	*	Net Each
WP510	.5Z/ 15750†	3V	B	$1.32
WP540	1.0Z/ 60†	3V	H	2.40
WP505	10Z/ 30†	3V	A	1.20
WP035	225	15	A	1.05
WP039	1000	15	C	1.53
WP041	2000	15	G	2.07
WP042	3000	15	H	2.10
WP052	40	25	A	.81
WP055	100	25	B	.96
WP057	500	25	C	$1.53
WP059	1000	25	F	2.13
WP063	4	50	A	.75
WP065	500	50	F	1.59
WP068	1500	50	I	2.31
FP113	30	150	A	.93
FP115	50	150	B	.99
FP116	100	150	C	1.20
FP116.5	120	150	D	1.23
FP117	150	150	D	1.29
FP118	200	150	G	1.47
FP119	300	150	H	1.68
FP121	120	200	F	$1.41
FP125	15	250	A	.93
FP126	200	250	H	2.43
FP128	80	300	D	1.53
FP129.1	100	300	D	2.10
FP131	150	300	H	2.10
FP135	30	350	B	1.14
FP137	50	350	C	1.26
FP137.2	60	350	D	1.32
FP138	80	350	G	1.71
FP140	125	350	H	2.37
FP142	10	450	A	.93
FP143	15	450	B	$1.
FP144	20	450	B	1.
FP145	30	450	C	1.
FP146	40	450	C	1.
FP148	60	450	G	1.
FP149	80	450	G	1.
FP150	100	450	H	2.
FP171	10	500	B	
FP173	20	500	B	1.
FP175	30	500	C	1.
FP177	40	500	D	1.
FP187	90	500	H	2.

FP-WP—DUALS

Mallory No.	Capacity µfd.	Working Volts DC	*	Net Each
WP204	250-1000	10-6	F	$1.71
WP205	.5Z-2.5Z/ 15750†-60†	12-6V	I	2.16
WP200	1000-1000	15-15	G	2.64
WP200.5	500-100	20-20	B	1.55
WP200.6	500-100	20-20	B	1.77
WP201.1	40-40	25-25	B	.93
WP202.1	50-50	50-50	B	1.02
WP202.5	100-100	50-50	B	1.26
WP206	50-150	150-25	C	1.32
FP208	20-20	150-150	B	1.02
FP211	30-30	150-150	B	1.11
FP210	40-20	150-150	B	1.08
FP212	40-40	150-150	C	1.14
FP213	50-30	150-150	B	1.20
FP213.1	50-30	150-150	B	1.20
FP214	50-50	150-150	C	1.29
FP214.5	75-75	150-150	F	1.56
FP216	80-40	150-150	D	1.38
FP215	125-100	150-150	G	2.04
FP216.3	200-150	150-150	I	2.25
FP216.4	200-200	150-150	I	2.40
FP216.1	200-5	200-200	G	1.65
FP216.6	60-60	200-200	D	1.53
FP216.8	40-25	250-150	C	1 29
FP217	20-20	250-250	B	1.14
FP221	40-40	250-250	D	1.50
FP217.7	150-150	250-250	I	3.09
FP217.74	200-200	250-250	I	3.60
FP217.8	20-60	300-250	D	$1.65
WP217.85	35-50	300-6	C	1.68
FP217.87	40-40	300-300	F	1.77
FP217.9	75-75	300-300	H	2.28
FP218	120-20	300-300	H	2.40
FP223	5-75	350-150	D	1.26
FP225	15-15	350-350	B	1.35
FP227	20-20	350-350	C	1.38
FP227.3	30-30	350-350	D	1.74
WP227.35	80-20	350-350	D	2.10
FP227.4	80-20	350-350	G	2.10
FP227.5	80-40	350-350	H	2.16
FP227.6	80-80	350-350	I	2.82
FP227.7	100-100	350-350	I	3.69
FP229	35-100	400-50	D	1.56
FP229.3	75-75	400-400	I	2.91
FP229.4	80-40	400-400	I	2.82
FP229.5	120-40	400-400	I	3.15
FP229.6	50-100	450-50	G	1.80
FP244	80-50	450-50	H	2.10
FP229.8	80-100	450-50	H	2.25
FP229.9	30-200	450-150	H	2.10
FP230	20-50	450-250	D	1.68
FP230.3	40-10	450-300	D	1.56
FP235	20-80	450-350	G	2.19
FP230.6	10-100	450-350	H	2.40
WP230.9	5-5	450-450	B	1.02
FP231	10-10	450-450	B	1.14
FP231.3	20-10	450-450	C	1.32
FP234	20-20	450-450	D	$1.
FP237	30-30	450-450	G	1.
FP238	40-40	450-450	H	2
FP239	50-40	450-450	H	2
FP240‡‡	50-50	450-450	H	2
FP242	60-20	450-450	H	2
FP242.5	60-60	450-450	I	2
FP245	80-10	450-450	H	2
FP245.2	80-20	450-450	H	2
FP245.3	80-30	450-450	I	2
FP247	100-40	450-450	I	2
FP250	40-80	475-200	G	2
FP255	20-100	475-300	H	2
FP256	20-100	475-400	I	2
FP258	15-15	475-475	C	1
FP259	30-10	475-475	D	1
FP260	40-10	475-475	H	1
FP262	40-40	475-475	H	2
FP263	60-40	475-475	I	2
FP264.5	80-40	475-475	I	3
FP266	80-50	475-475	I	3
FP277‡	60-80	500-150	H	2
FP280‡	40-50	500-200	G	1
FP284‡	30-30	500-500	G	1
FP288‡	40-40	500-500	H	2

‡‡Recommended for photoflash appli tions. Can is ungrounded. ‡Limited ope tion up to 65° C. †Cycles.

FP-WP—TRIPLES

Mallory No.	Capacity µfd.	Working Volts DC	*	Net Each
WP300	20-500-1000	16-16-16	F	$2.52
WP301	30-30-30	50-50-50	B	1.29
WP520	40-40-40	25-25-25	B	1.29
FP303	20-250-100	150-15-15	F	1.74
FP312	100-50-25	150-50-25	D	1.80
WP302.1	15-15-1200	150-150-2	B	1.80
FP302.4	80-20-200	150-150-10	F	1.71
FP302.5	80-60-250	150-150-10	C	2.04
FP302.7	80-30-300	150-150-10	F	1.89
FP302.8	100-80-200	150-150-10	G	2.16
FP302.9	80-20-100	150-150-15	F	1.68
FP306	40-20-20	150-150-25	B	1.38
FP307	40-20-100	150-150-25	C	1.50
FP304	40-20-200	150-150-25	C	1.62
FP310	40-40-20	150-150-25	C	1.44
FP314	40-40-200	150-150-25	D	1.68
WP308.1	40-40-250	150-150-25	D	1.89
FP309	50-30-100	150-150-25	C	1.62
FP311	50-50-20	150-150-25	D	1.59
FP311.1	80-40-25	150-150-25	D	1.65
FP311.15	80-40-300	150-150-25	G	2.22
FP311.2	20-20-20	150-150-150	B	1.38
FP311.4	40-20-20	150-150-150	C	1.44
FP311.5	40-40-40	150-150-150	D	1.56
FP311.55	50-20-20	150-150-150	C	1.53
FP311.6	50-40-10	150-150-150	B	1.53
FP311.65	50-50-50	150-150-150	D	1.80
FP311.66	70-15-15	150-150-150	C	1.62
FP311.67	80-30-10	150-150-150	D	1.65
FP311.7	80-40-20	150-150-150	F	1.74
FP311.9	120-120-40	150-150-150	H	2.43
FP312.5	200-100-60	150-150-150	I	2.73
FP318.3	20-20-40	200-200-150	C	1.62
FP318.5	20-20-20	200-200-200	C	1.50
FP318.7	30-20-20	200-200-200	C	1.62
FP319	80-40-50	250-150-50	G	1.98
FP319.5	90-90-20	250-250-50	H	2.76
FP319.8	20-20-20	250-250-250	B	1.56
FP320	40-20-20	250-250-250	F	1.74
FP321	40-20-20	250-250-250	D	1.74
FP326	100-60-20	300-150-25	H	2.52
FP326.2	20-150-80	300-150-150	H	2.37
FP326.3	100-200-60	300-150-150	I	3.77
FP326.4	60-30-30	300-250-250	G	2.25
FP335	100-60-20	300-250-250	H	2.94
FP336	200-60-20	300-250-250	I	$3.48
FP326.6	100-10-60	300-300-50	G	2.43
FP326.7	140-100-60	300-300-50	I	3.57
FP326.74	140-10-200	300-300-150	I	3.50
WP326.8	4-100-40	350-25-25	B	1.35
FP327	40-100-25	350-50-25	F	1.92
WP327.2	20-50-100	350-100-75	D	1.98
FP327.4	125-5-100	350-200-75	I	3.18
FP327.6	30-20-100	350-250-50	D	1.95
FP331	30-30-20	350-300-25	D	1.89
FP327.8	30-50-20	350-300-25	G	2.16
FP328	15-10-20	350-350-25	B	1.50
FP327.9	20-4-100	350-350-25	D	1.56
FP329.1	20-4-100	350-350-25	C	1.56
FP329.5	20-20-20	350-350-25	B	1.60
FP330	30-20-20	350-350-25	D	1.86
FP330.15	10-5-30	350-350-50	B	1.32
FP330.2	10-5-150	350-350-50	C	1.62
FP330.21	20-5-150	350-350-50	D	1.77
FP330.23	40-80-400	350-350-50	H	3.39
FP330.25	30-20-100	350-350-150	G	2.40
FP330.3	20-10-5	350-350-250	B	1.53
FP330.5	10-10-10	350-350-350	B	1.44
FP330.7	30-20-10	350-350-350	D	1.95
FP330.9	60-50-50	350-350-350	I	2.94
FP331.3	80-60-60	350-350-350	I	3.33
FP331.6	90-40-20	350-350-350	I	3.15
FP332.4	100-100-10	350-350-350	I	4.08
FP333	10-50-30	400-350-25	F	1.86
FP333.2	80-40-100	400-400-50	I	3.00
FP333.3	80-40-150	400-400-50	I	3.09
FP333.5	20-10-40	400-400-350	E	2.04
FP333.6	20-20-10	400-400-350	D	1.80
FP333.7	60-30-20	400-400-350	H	2.73
FP333.8	80-20-10	400-400-350	H	2.58
FP333.85	100-10-80	400-400-350	I	3.66
FP333.9	90-10-5	400-400-400	H	2.64
WP334.6	20-500-500	450-25-25	H	3.21
FP342	40-40-130	450-150-50	G	2.22
FP343	40-100-50	450-150-50	H	2.37
WP339.5	10-50-100	450-150-75	D	1.95
FP340	20-50-100	450-150-75	F	2.04
FP341	40-90-50	450-150-150	H	2.40
FP341.3	20-80-50	450-200-150	G	2.16
FP341.5	20-60-100	450-250-25	G	2.19
FP341.8	10-80-80	450-250-250	H	2.61
FP342.2	5-80-40	450-300-300	H	$2.
FP342.5	30-15-40	450-350-25	H	1
FP342.7	30-40-50	450-350-25	E	2
FP343.1	15-20-20	450-350-250	D	1
FP343.4	20-15-15	450-350-350	D	1
FP343.6	20-40-10	450-350-350	G	2
FP343.9	10-30-150	450-400-5	D	1
FP344.2	60-80-20	450-400-250	I	3
FP344.4	4-40-40	450-400-300	G	2
FP344.5	10-30-40	450-400-300	G	2
FP345.2	10-10-20	450-450-25	B	1
FP345.3	40-20-20	450-450-25	G	2
FP345.4	80-10-120	450-450-25	H	2
FP345.5	15-15-40	450-450-25	C	1
FP345.8	20-20-20	450-450-25	C	1
FP346	40-40-20	450-450-25	H	2
FP364	80-40-100	450-450-25	I	3
FP366	20-10-50	450-450-50	D	1
FP366.5	30-10-150	450-450-50	G	2
FP367	35-25-100	450-450-50	H	2
FP367.5	40-30-25	450-450-50	G	2
FP368	60-40-75	450-450-50	I	2
FP368.3	80-20-100	450-450-50	I	2
FP386.6	30-30-125	450-450-75	H	2
FP369.1	40-40-40	450-450-150	H	2
FP370	40-10-80	450-450-200	H	2
FP375	40-40-100	450-450-200	I	2
FP375.2	15-10-120	450-450-300	I	2
FP375.4	40-40-60	450-450-350	I	2
FP375.5	40-40-80	450-450-350	I	3
FP375.6	60-20-40	450-450-350	I	2.
FP375.7	20-10-15	450-450-400	D	1
FP375.8	10-10-10	450-450-450	C	1
FP376.1	15-15-10	450-450-450	D	1
FP376.3	20-10-10	450-450-450	D	1
FP376.5	20-20-20	450-450-450	G	2
FP376.6	30-10-10	450-450-450	F	1
FP376.7	30-30-30	450-450-450	H	2
FP376.8	40-40-10	450-450-450	H	2
FP376.9	40-40-20	450-450-450	H	2
FP377	40-40-40	450-450-450	I	2
FP377.2	50-40-30	450-450-450	I	2
FP377.4	60-10-10	450-450-450	H	2
FP377.6	60-30-10	450-450-450	H	2
FP378	80-40-20	450-450-450	I	3
FP379.1	20-50-20	475-50-25	D	1

*Size.

allory Electrolytic Capacitors

FP-WP—TRIPLES—CONTINUED

y	Capacity µfd.	Working Volts DC	*	Net Each
.	80-80-50	475-150-50	I	$2.91
l	40-40-100	475-250-100	H	2.46
	20-20-40	475-300-25	F	1.86
14	5-100-200	475-300-150	I	3.09
2	10-4-40	475-350-300	F	1.80
5	10-45-100	475-450-50	H	2.19
7	40-40-25	475-450-50	H	2.64
	10-40-100	475-450-200	H	2.52

Mallory No.	Capacity µfd.	Working Volts DC	*	Net Each
FP385.5	40-80-10	475-450-450	I	$3.30
FP386	10-10-5	475-475-25	C	1.47
FP387.1	10-10-150	475-475-50	D	1.80
FP388.1	25-10-20	475-475-50	D	1.77
FP389.1	20-10-100	475-475-400	I	3.15
FP391.1	20-20-60	475-475-450	I	2.91
FP394	10-10-10	475-475-475	D	1.62
FP396	30-30-20	475-475-475	H	2.67

Mallory No.	Capacity µfd.	Working Volts DC	*	Net Each
FP396.1	40-20-20	475-475-475	H	$2.85
FP396.12	40-30-10	475-475-475	H	2.70
FP396.14	40-30-30	475-475-475	I	3.09
FP396.2	40-10-10	475-475-475	G	2.31
FP397	40-35-10	475-475-475	H	2.73
FP398	10-40-40	500-450-450	H	2.49
....	....	....	...	.....
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FP-WP—QUADS

ory	Capacity µfd.	Working Volts DC	*	Net Each
	50-20-150-30	150-150-15-15	F	$1.92
	20-20-160-40	150-150-25-25	F	1.92
5.5	40-50-160-40	150-150-25-25	F	2.01
6	40-40-200-100	150-150-25-25	F	2.13
	30-20-20-200	150-150-150-10	F	1.86
.5	40-40-20-200	150-150-150-10	F	1.92
	60-40-20-200	150-150-150-10	F	2.07
.5	80-80-10-200	150-150-150-10	G	2.34
	40-40-30-20	150-150-150-25	F	1.86
.4	50-20-20-200	150-150-150-25	F	2.10
.6	50-10-40-50	150-150-150-25	F	1.89
	50-50-50-20	150-150-150-25	G	2.13
.3	60-40-20-20	150-150-150-25	F	1.98
.7	60-60-10-60	150-150-150-25	G	2.10
	80-40-30-100	150-150-150-25	G	2.22
.3	80-40-40-20	150-150-150-25	G	2.10
.32	80-40-40-40	150-150-150-25	G	2.16
.4	80-50-50-25	150-150-150-25	G	2.28
.5	100-90-60-200	150-150-150-25	H	2.97
.7	125-125-40-100	150-150-150-25	I	2.91
.8	200-200-100-10	150-150-150-75	I	3.57
	100-80-60-40	150-150-150-150	H	2.79
.2	40-40-50-80	250-250-150-50	G	2.46
	100-40-80-20	300-50-25-25	G	2.73
.3	10-200-140-30	300-150-150-150	I	3.06
.8	10-200-200-30	300-150-150-150	I	3.21
.3	120-20-100-20	300-250-50-25	I	3.03
	200-20-100-20	300-250-50-25	I	3.48
	40-40-40-40	300-250-250-25	G	2.64
.7	140-10-10-100	300-300-150-50	I	2.97
.1	150-20-10-250	300-300-250-50	I	3.63
.2	40-30-20-50	300-300-300-25	G	2.49
.7	60-40-20-50	300-300-300-25	H	2.79
.35	60-30-10-60	300-300-300-50	G	2.52
.37	150-30-30-150	300-300-300-50	I	3.66
.4	100-10-200-30	300-300-150-150	I	3.54
.5	40-40-30-20	300-300-300-300	H	2.91
.53	60-40-10-10	300-300-300-300	H	2.73
.54	200-20-20-20	300-300-300-300	I	3.87
.56	60-60-30-160	350-150-150-25	H	2.76
.58	20-60-160-40	350-200-25-25	G	2.40
.65	160-60-10-4	350-300-300-300	I	3.84
	15-80-40-200	350-200-200-25	H	2.70
.6	40-10-10-25	350-350-25-25	F	2.25
.62	60-4-100-40	350-350-25-25	G	2.28
.64	40-20-50-25	350-350-150-25	G	2.49
.66	60-40-60-20	350-350-250-150	I	3.24
.67	60-100-60-40	350-350-200-75	I	3.93
.68	15-15-15-15	350-350-300-25	F	2.07
.8	35-35-10-20	350-350-300-25	G	2.49
.82	20-10-5-10	350-350-350-25	F	1.86
.84	30-10-5-200	350-350-350-25	F	2.28
.86	40-20-5-10	350-350-350-25	G	2.28
.87	40-20-20-50	350-350-350-325	G	2.55
.88	40-30-15-30	350-350-350-25	G	2.70
.3	40-40-20-20	350-350-350-25	H	2.79
.9	15-15-15-50	350-350-350-50	F	2.25
.2	50-40-40-160	350-350-350-50	I	3.45
0.23	100-10-10-20	350-350-350-50	H	3.09
0.26	100-40-30-50	350-350-350-50	I	3.93
0.28	140-20-10-100	350-350-350-50	I	3.63
0.29	90-30-5-100	350-350-350-75	I	3.54
0.32	20-10-5-60	350-350-350-200	G	2.19
0.33	30-10-5-100	350-350-350-200	G	2.64
0.35	40-20-20-10	350-350-350-350	G	2.61
0.38	40-40-40-40	350-350-350-350	I	3.60
0.41	40-120-10-150	400-250-250-50	I	3.48
0.44	30-40-50-200	400-300-250-150	I	3.60
0.45	40-80-100-25	400-350-200-50	I	3.63
0.47	20-50-40-80	400-350-350-50	H	3.00
0.5	30-60-20-100	400-350-350-50	I	3.00
0.53	20-5-20-20	400-400-25-25	F	1.83
0.56	50-25-100-20	400-400-50-25	H	2.79
0.6	80-40-100-20	400-400-50-25	I	3.36
0.7	100-10-30-20	400-400-50-50	H	3.06
0.8	20-10-10-25	400-400-100-25	F	1.86
1	5-5-50-80	400-400-300-250	H	2.79
1.2	60-40-40-10	400-400-350-50	I	3.45
1.4	30-30-15-20	400-400-400-25	H	2.58
1.6	80-40-30-40	400-400-400-25	I	3.57
1.8	40-40-40-150	400-400-400-50	I	3.42
2.1	20-80-20-50	450-200-200-50	G	2.46
2.7	60-80-40-20	450-250-250-150	I	3.39
2.9	10-100-20-20	450-300-300-300	H	3.15
3X	40-40-40-20	450-300-300-150	H	2.94
3.4	10-40-100-100	450-350-250-50	H	3.33
4.1	10-100-10-20	450-350-350-25	H	3.12
5.1	80-10-40-30	450-400-300-300	I	3.48
6	20-15-20-20	450-450-25-25	F	2.07
6.5	20-20-60-100	450-450-150-25	G	2.55
6.9	40-40-125-125	450-450-150-25	I	3.42
7.5	10-10-60-100	450-450-200-50	G	2.31
7.6	35-25-20-100	450-450-200-50	H	2.79
7.7	10-10-10-50	450-450-300-25	F	1.89

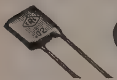
Mallory No.	Capacity µfd.	Working Volts DC	*	Net Each
FP427.9	20-20-20-10	450-450-350-350	H	$2.49
FP428	40-10-35-10	450-450-350-350	H	2.76
FP428.4	40-40-30-30	450-450-350-350	I	3.54
FP424	15-15-10-20	450-450-450-25	F	2.10
FP428.9	30-30-10-125	450-450-450-25	H	2.58
FP432	40-10-10-250	450-450-450-25	H	2.82
FP431	40-15-10-25	450-450-450-25	G	2.46
FP430.2	40-20-20-25	450-450-450-25	H	2.76
FP436	40-20-20-40	450-450-450-25	H	2.79
FP429	40-30-10-20	450-450-450-25	H	2.70
FP430.6	40-40-40-40	450-450-450-25	I	3.30
FP430.9	60-40-40-10	450-450-450-25	I	3.60
FP430.95	60-50-5-20	450-450-450-25	I	3.21
FP437	20-20-20-100	450-450-450-50	G	2.73
FP431.2	40-40-10-25	450-450-450-50	H	2.82
FP431.3	40-40-10-50	450-450-450-50	I	2.13
FP431.4	60-40-10-25	450-450-450-50	I	3.15
FP431.7	40-40-10-100	450-450-450-100	I	3.18
FP433	60-10-10-20	450-450-450-150	H	2.76
FP432.4	40-40-30-10	450-450-450-200	I	3.21
FP432.9	40-20-10-100	450-450-450-250	I	3.51
FP433.2	40-10-10-40	450-450-450-350	H	2.85
FP433.4	40-20-20-20	450-450-450-350	H	3.00
WP433.6	5-5-5-5	450-450-450-450	F	1.80
FP434	10-10-10-10	450-450-450-450	F	2.01
FP434.5	20-10-10-10	450-450-450-450	F	2.22
FP444	20-20-20-20	450-450-450-450	H	2.82
FP444.4	30-15-15-15	450-450-450-450	H	2.67
FP444.5	30-30-20-10	450-450-450-450	H	2.76
FP444.6	30-30-15-10	450-450-450-450	H	2.82
FP444.8	30-30-20-20	450-450-450-450	H	3.12
FP444.9	30-30-30-15	450-450-450-450	I	3.18
FP445	35-35-10-5	450-450-450-450	H	2.76
FP446	40-35-10-10	450-450-450-450	H	2.88
FP447	40-40-20-20	450-450-450-450	I	3.33
FP447.5	40-40-30-30	450-450-450-450	I	3.63
FP448	60-20-20-20	450-450-450-450	I	3.39
FP448.5	60-30-10-2	450-450-450-450	H	3.06
FP449	70-10-10-5	450-450-450-450	H	2.85
FP450	80-10-10-10	450-450-450-450	I	3.03
FP451	10-100-10-100	475-300-300-25	H	2.94
FP451.3	10-4-140-100	475-300-300-50	I	3.18
FP452	20-80-20-10	475-300-300-300	H	3.00
FP453	20-40-80-100	475-350-200-100	I	3.27
FP453.4	10-40-80-100	475-350-300-100	I	3.33
FP453.8	10-30-5-80	475-350-350-50	G	2.22
FP454.2	20-60-40-10	475-350-350-350	H	3.12
FP454.6	10-40-4-100	475-400-350-50	G	2.43
FP456	25-20-40-100	475-450-300-50	H	2.97
FP456.5	10-60-30-125	475-450-400-50	I	3.33
FP455	10-50-30-30	475-450-450-25	H	2.85
FP459	10-40-10-100	475-450-450-50	G	2.58
FP461	15-15-80-40	475-475-300-50	H	2.88
FP463	50-30-20-20	475-475-300-300	I	3.42
FP464.9	40-10-4-40	475-475-350-350	H	2.97
FP467	20-10-20-100	475-475-450-25	G	2.52
FP474	10-10-10-10	475-475-475-475	F	2.10
FP474.5	20-20-10-10	475-475-475-475	G	2.61
FP475	20-20-20-20	475-475-475-475	H	3.12
FP475.5	40-10-10-10	475-475-475-475	H	2.79
FP476	40-20-10-10	475-475-475-475	H	3.06
FP495	40-40-8-8	500-500-500-500	I	3.42

*SIZES

Key	Diameter	Length	Key	Diameter	Length
A	¾"	2"	F	1⅜"	2"
B	1"	2"	G	1⅜"	2½"
C	1"	2½"	H	1⅜"	3"
D	1"	3"	I	1⅜"	4"
E	1"	4"	....	....	....

PLEASE WRITE FOR INFORMATION AND PRICES ON ANY UNLISTED CAPACITORS OR CAPACITOR HARDWARE.

Centralab Special Capacitors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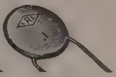
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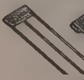
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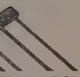
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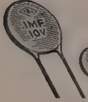
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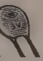
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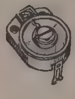
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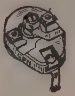
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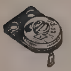
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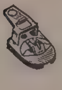
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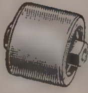
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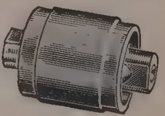
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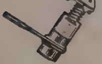
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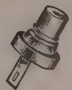
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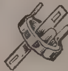
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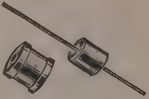

853, 854, 855

MINIATURE PLATE CAPACITORS

Extremely small size. Proven in use by transistor radio receivers. designed for cathode bypass and transistor applications. Power factor, 2.5% at 1 kc. Rated 30 v. DC working; 50 v. DC test. Vacuum wax impregnated with Durez resin coating. Tolerances: +100% −20%.

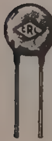
CRL No.	Cap. µf	Size (Sq.) In., Max.	Thick, Inches	Net Each
DA-203	.02	½	.140	24c
DA-503	.05	½	.160	39c
DA-104	.1	½	.187	57c

TYPE DDA MINIATURE DISCS

Disc type similar to above, 75 VDCW, 150 VDCT. Size: ⅝" diam. x 5/32" thick.

CRL No.	Cap. µf	Tolerance	Net Each
DDA-503	.05	−30% +80%	30c
DDA-104	.1	−30% +80%	54c

MIN-KAP® MINIATURE CAPACITORS



Ceramic disc type capacitors for smaller voltage requirement applications: 150 VDCW; 300 VDC test. Very small in size; maximum of ⅜" diam. in high capacity values. Ideal for hearing aid, miniature radio, intercom and experimental rigs. Packaged 5 per package. Tolerance: −40% +60%.

CRL Number	Cap. µf	VDCW	Thickness Inches	Net Each
DDM-502	.005	150	.146	30c
DDM-103	.01	150	.146	30c
DDM-203	.02	150	.166	54c
DDM2-103	2 x .01	150	.166	54c

FLAT-PLATE MIN-KAPS®

150 VDCW, 300 v. DC test. Size: 7/16" x 11/32" x 1/16". Tolerance +50%, −20%, exdept (*) +80%, −20%.

CRL No.	Cap., µµf	Net Each	CRL No.	Cap., µµf	Net Each
DM-101	.0001	21c	DM-202	.002	27c
DM-201	.0002	21c	DM-302	.003	27c
DM-301	.0003	21c	DM-502	.005	37c
DM-501	.0005	21c	DM-103	.01	39c
DM-102	.001	27c	DM2-502	2 x .005	54c

TYPES UK AND UK10 ULTRA-KAPS

Miniature ceramic disc capacitors for transistor circuit uses; ideally suited for low voltage uses requiring extremely high capacities and low power factors. Leads are No. 22 tinned copper wire. Wt., 2 oz. **Type UK:** Rated 3 v. DC working; GMV tolerance. **Type UK10:** Rated 10 v. DC working; tolerance +80, −20%.

Type UK—3 WVDC				Type UK10—10 WVDC			
CRL Number	Cap., µf	Dia., In.	Net Each	CRL Number	Cap., µf	Dia., In.	Net Each
UK-104	.1	3/16	54c	UK10-503	.05	¼	33c
UK-224	.22	¼	33c	UK10-104	.1	⅜	33c
UK-474	.47	⅜	33c	UK10-204	.2	9/16	45c
UK-105	1.0	9/16	45c	UK10-474	.47	¾	54c
UK-225	2.2	¾	54c				

CERAMIC AND STEATITE TRIMMERS

Highly stable, small lightweight design. Power factor less 0.2% at 1 mc. All units rated 600 v. DC, working; 1200 v. test. **Suffix Z:** Indicates zero temperature coefficient. **Suffi** Indicates negative coefficient. Shpg. Wt., 3 oz. max.

CRL Type 820—High dielectric ceramic base impervious moisture. Flat rotor and stator. Mounting holes take No. 4 machine screws; ⅝" x 27/32". Net Each.................. 7

CRL Type 822—Steatite body; silver rotor and statpr pl 41/64" x 27/32". Mtg. holes take No. 4 screw. Net Each.......

CRL Type 823—Steatite body; 15/16" x 19/32". Net Each....$2.

CRL Type 827—Ceramic molded phenolic body has high stab under vibration. Insulation resistance 10,000 megs. minim Size: 17/32" x ¾". Net Each.......................... 7

CRL Types 829-3, -4, and -6—Tiny, tubular, high voltage t for TV or FM. Ceramic bodies .215" dia. Full capacity in rotation Net Each.................................. 3

CRL Types 829-7 and 829-10—Same as above. Net Each 3

CRL No.	Range, µµf	CRL No.	Range, µµf	CRL No.	Range,
820D	1.0-3.5	822-AZ	4.5-25	823-DN	8.-50
820A	2.5-6.0	822-DN	2.0-6.0	823-BN	10.-1
820B	5.0-20	822-EN	4.0-30	823-AN	20.-1
820C	7.0-35	822-CN	4.5-25	827A	2.5-7
820E*	35-55	822-BN	7.0-45	827B	3.5-
820F*	55-75	822-AN	8.0-50	827C	6.0-3
820G*	70-90	823-EZ	5.-12	827D	7.0-3
822-DZ	1.5-3	823-DZ	6.-25	829-3	.5-3
822-EZ	1.5-7	823-BZ	10.-50	829-4	1.-4
822-CZ	2.0-7.5	823-AZ	12-60	829-6	1.-6
822-BZ	2.5-13.0	823-FN	5.-15	829-7	1.-7.5
822-FZ	3.0-12	823-EN	8.-25	829-10	1.5-1

*Less brackets.

TYPE 833 TRIMMERS

Steatite body trimmers have silver rotor and stator pla Size: 21/32" x 27/32". Meet MIL-C-81A specifications. **$1**

CRL Type 833—Net Each..............................

CRL No.	MIL Spec.	Cap., µµf	CRL No.	MIL Spec.	Cap.,
833-EZ	CV11A070	1.5-7	833-DN	CV11D060	2-6
833-FZ	CV11A120	3-12	833-EN	CV11D300	4-3
833-AZ	CV11A250	4.5-25	833-BN	CV11D450	7-4

TRANSMITTING CAPACITORS

Designed for high voltage, high frequency circuits requiring low power factor and stable retrace characteristics. Double design for long leakage paths and rugged construction.

TYPE 850 AND 858—5 AND 7.5 KV

Tolerance: ±10% 850 type; ±20% 858 type. Size: 13/16" dia. x Stud type has ⅛" long hex studs 6-32 thread. Lug type 17/32" solder lugs with tapped 6-32 threaded hole.

CRL No.		Cap. µµf	KV DCW	Temp. Coeff.	RF Load at 30 MC†	Ne Ea
Stud Type	Lug Type					
850S-25Z	859SL-25Z	25	7.5	NPO	7 amps.	
850S-50Z	850SL-50Z	50	7.5	NPO	10 amps.	
850S-50N	850SL-50N	50	7.5	N750	8.8 amps.	$2
850S-75N	850SL-75N	75	7.5	N750	10 amps.	
850S-100N	850SL-100N	100	5	N750	9.8 amps.	
858S-500	....	500	5	Hi-K	....	
858S-1000	....	1 K	5	Hi-K	....	

TYPE 853, 854, 855—5 KV

Tolerance: ±10%. Size: 853, 9/16" dia. x ½". 854, 7/16" dia. x 855, 5/16" dia. x ⅜". Lead type has 1½" axial leads. Tap type axial screw terminals tapped 2-56.

CRL No.		Cap. µµf	KV DCW	Temp. Coeff.	RF Load at 30 MC†	N Ea
Lead Type	Tap Type					
855-3Z	855A-3Z	3	5	NPO	1.8 amps.	
855-5Z	855A-5Z	5	5	NPO	1.8 amps.	
854-10Z	854A-10Z	10	5	NPO	1.8 amps.	$1
855-10N	855A-10N	10	5	N750	3.2 amps.	
853-20Z	853A-20Z	20	5	NPO	2.8 amps.	
854-20N	854A-20N	20	5	N750	3.2 amps.	
853-40N	853A-40N	40	5	N750	5.6 amps.	

TYPE 857—7.5 AND 15 KV

Tolerance: 10%. Size: 1 9/32" dia. x 1 5/16". Axial screw termina both ends; ¼" deep 10-32 NF-2 thread.

CRL No.	Cap. µµf	Temp. Coeff.	RF Load at 30 MC†	KV DCW	Net Each
857-25Z	25	NPO	12 amps.	15	$8.4
857-50Z	50	NPO	12 amps.	15	8.4
857-100N	100	N750	14.4 amps.	15	7.2
857-200N	200	N750	18.2 amps.	7.5	7.2

TYPE 859—15 AND 20 KV

Tolerance: ±10%. Size: 2" dia. x 2⅞" overall. Terminals 7/16" d both ends, tapped 10-32.

859S-50Z	50	NPO	30 amps.	20	$54
859S-100Z	100	NPO	30 amps.	20	
859S-250N	250	N750	30 amps.	20	
859S-500N	500	N3300	30 amps.	15	

†R.F. Load Ratings based on 30° C rise in temperature.

BUTTON-STYLE CERAMICS

Solder-sealed for long life and high quality performance. Sh effective at ground potential. 500 VDCW, 1000 VDCT. **Type** is standoff 3-48 thread tapped base and ground terminal. **Type** is feed-thru style with three solder lugs.

Cap. µµf	CRL No.	Tol.	Net Each	CRL No.	Tol.	Ne Ea
15	ZA-150	±10%	75c	ZB-150	±10%	75
50	ZA-500	±10%		ZB-500	±10%	
500	ZA-501	±20%		ZB-501	±20%	
1000	ZA-102	GMV		ZB-102	GMV	

tralab Ceramic Capacitors, Kits

-6000 VOLT HI-VO-DISC® CAPACITORS

units are highly or bypass-coup- h frequency cir- er conditions of umidity or tem- Maintain high nd performance All units have a of ±20%.

DD30—3000 v. DC working, 6000 v. DC test; 7/32" lues through 2700 μμf. Net Each................ 24c
DD30—Values 3000 μμf through 5000 μμf. Net Ea. 30c
DD60—6000 v. DC working, 12,000 v. DC test; 21/64" lues through 820 μμf. Net Each.................. 30c
DD60—Values 1000 μμf and up. Net Each....... 51c

3000 Volt, DC Working		6000 Volt, DC Working	
CRL No.	Dia.	CRL No.	Dia.
DD30-4R7	1/4"	DD60-4R7	9/16"
DD30-6R8	1/4"	DD60-6R8	9/16"
DD30-8R2	1/4"	DD60-8R2	9/16"
DD30-100	1/4"	DD60-100	9/16"
DD30-120	1/4"	DD60-120	9/16"
DD30-150	1/4"	DD60-150	9/16"
DD30-220	1/4"	DD60-220	9/16"
DD30-250	1/4"	DD60-250	9/16"
DD30-270	1/4"	DD60-270	9/16"
DD30-300	1/4"	DD60-300	9/16"
DD30-330	1/4"	DD60-330	9/16"
DD30-390	1/4"	DD60-390	9/16"
DD30-470	1/4"	DD60-470	9/16"
DD30-500	1/4"	DD60-500	9/16"
DD30-560	1/4"	DD60-560	9/16"
DD30-680	1/4"	DD60-680	9/16"
DD30-750	1/4"	DD60-750	9/16"
DD30-820	1/4"	DD60-820	9/16"
DD30-101	1/4"	DD60-101	9/16"
DD30-121	1/4"	DD60-121	9/16"
DD30-151	1/4"	DD60-151	9/16"
DD30-181	1/4"	DD60-181	9/16"
DD30-201	1/4"	DD60-201	9/16"
DD30-221	1/4"	DD60-221	9/16"
DD30-251	1/4"	DD60-251	9/16"
DD30-271	1/4"	DD60-271	9/16"
DD30-301	1/4"	DD60-301	9/16"
DD30-331	1/4"	DD60-331	9/16"
DD30-391	1/4"	DD60-391	9/16"
DD30-401	1/4"	DD60-401	9/16"
DD30-471	3/8"	DD60-471	9/16"
DD30-501	3/8"	DD60-501	9/16"
DD30-561	3/8"	DD60-561	9/16"
DD30-681	3/8"	DD60-681	9/16"
DD30-751	3/8"	DD60-751	9/16"
DD30-821	3/4"	DD60-821	9/16"
DD30-102	9/16"	DD60-102	3/4"
DD30-122	9/16"	DD60-122	3/4"
DD30-152	9/16"	DD60-152	3/4"
DD30-202	5/8"	DD60-202	7/8"
DD30-222	5/8"	DD60-222	7/8"
DD30-252	5/8"		
DD30-272	5/8"		
DD30-302	3/4"		
DD30-332	7/8"		
DD30-392	7/8"		
DD30-472	7/8"		
DD30-502	7/8"		

TYPE DD2 DUO-KAPS®

sc, dual capacity. Double Durez insulation. Rated 600 v. king; 1200 v. DC, test.

Cap., μf	Tolerance	Dia.	Thick.	Net Each
2 x .001	GMV	3/8"	5/32"	24c
2 x .0015	GMV	9/16"	5/32"	24c
2 x .005	−20% +80%	5/8"	5/32"	24c

TYPE DD3 SHIELDED DUO-KAPS®

ads—two capacitors in the space formerly needed for one. to minimize stray capacities between discs. Rated 600 v. king; 1200 v. DC, test.

Cap., μf	Tolerance	Dia.	Thick.	Net Ea.
2 x .001	GMV	3/8"	7/32"	24c
2 x .0015	GMV	3/8"	7/32"	24c
2 x .002	GMV	9/16"	7/32"	30c
2 x .005	GMV	9/16"	7/32"	30c
2 x .01	GMV	5/8"	7/32"	30c

TYPE DD16 HI-KAP® BUFFERS

, easy to install. Long life, low cost. Able to withstand t, moisture, and vibration. Size: 7/8" diam., 11/64" thick.

No.	Cap., μf	Tolerance	VDCW	Net Ea.
-302	.003	GMV	1600	21c
-402	.004	GMV	1600	21c
-502	.005	GMV	1600	21c
-602	.006	GMV	1600	21c
-702	.007	GMV	1600	21c
-752	.0075	GMV	1600	21c
-802	.008	GMV	1600	21c
-103	.01	GMV	1600	21c
-153*	.015	−20% +80%	1600	36c

k.

1000 WVDC DD DISC HI-KAPS®

Ideal for bypass coupling in high frequency circuits. Rated 1000 v. DC working except Nos. DD6-103, DD-153, DD-203, DD-303, DD-403 and DD-503, which are 600 v. DC working. Tolerance ±10%, except as otherwise indicated.

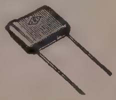
CRL No. DD-	Cap., μμf	Dia., In.	Net Each	CRL No. DD-	Cap., μμf	Dia., In.	Net Each
3R3	3.3*	1/4	15c	501	500	1/4	15c
050	5	1/4	15c	511	510	1/4	15c
060	6	1/4	15c	561	560	1/4	15c
6R8	6.8	1/4	15c	601	600	1/4	15c
7R5	7.5	1/4	15c	681	680	1/4	15c
080	8	1/4	15c	751	750	1/4	15c
100	10	1/4	15c	801	800†	1/4	15c
120	12	1/4	15c	821	820	1/4	15c
150	15	1/4	15c	911	910	1/4	15c
180	18	1/4	15c	102	1000	3/8	15c
200	20	1/4	15c	102G	1000†	1/4	15c
220	22	1/4	15c	122	1200	3/8	15c
240	24	1/4	15c	122G	1200†	1/4	15c
250	25	1/4	15c	132	1300	3/8	15c
270	27	1/4	15c	152	1500	3/8	15c
300	30	1/4	15c	152G	1500†	1/4	15c
330	33	1/4	15c	162	1600	3/8	15c
390	39	1/4	15c	182	1800	3/8	15c
470	47	1/4	15c	202	2000†	3/8	15c
500	50	1/4	15c	222	2200†	3/8	15c
510	51	1/4	15c	252	2500†	3/8	15c
560	56	1/4	15c	272	2700†	3/8	15c
680	68	1/4	15c	302	3000†	3/8	15c
750	75	1/4	15c	332	3300†	9/16	15c
820	82	1/4	15c	392	3900†	9/16	15c
910	91	1/4	15c	402	4000†	9/16	15c
101	100	1/4	15c	432	4300†	9/16	15c
121	120	1/4	15c	472	4700‡	9/16	15c
131	130	1/4	15c	472G	4700†	9/16	15c
151	150	1/4	15c	5022	5000‡	9/16	15c
181	180	1/4	15c	502	5000†	5/8	15c
201	200	1/4	15c	562	5600†	9/16	15c
221	220	1/4	15c	682	6800†	9/16	15c
241	240	1/4	15c	752	7500†	9/16	15c
251	250	1/4	15c	822	8200†	5/8	15c
271	270	1/4	15c	6-103	10,000†	5/8	15c
301	300	1/4	15c	1032	10,000‡	3/4	18c
331	330	1/4	15c	103	10,000†	3/4	15c
351	350	1/4	15c	153	15,000§	7/8	18c
361	360	1/4	15c	203	20,000§	7/8	18c
391	390	1/4	15c	303	30,000§	7/8	30c
401	400	1/4	15c	403	40,000§	7/8	30c
471	470	1/4	15c	503	50,000§	7/8	30c
471G	470†	1/4	15c	......	......	......	......

Tolerance: *±0.5 μμf. †GMV. ‡±20%. §+80, −20%.

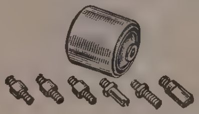
TYPE DF FLAT-PLATE HI-KAPS®

A dependable 600 volt ceramic capacitor recommended for general replacement applications where their unusual thinness makes them useful. Types listed below are 1 7/16" l. x 1 1/16" h. 600 v. DC, working; 1200 v. DC. test.

CRL No.	Cap. μf	Thickness	Net Each
DF-303	.03	7/32"	54c
DF-403	.04	7/32"	54c
DF-503	.05	7/32"	54c
DF-753	.075	19/64"	75c
DF-104	.1	19/64"	75c



ATTACHABLE TERMINAL HI-VO-KAPS®



TYPE TV-20—20,000 v. DC working ceramic capacitors; 35,000 v. DC test. Capacity 500 μμf. Terminals will not pull out or break off. Fivedifferent type terminalsavailable as listed below.
Type TV-20 Capacitor— Net Each............... $1.11

ATTACHABLE TERMINALS

CRL Type TX—Net Each................................ 6c

CRL No.	Type	Thread	CRL No.	Type	Thread
TX-1	Slotted Rod	....	TX-4	Short Male	8-32
TX-2	Female Tap	6-32	TX-5	Long Male	8-32
TX-3	Male Thread	6-32	.....	....	....

HI-VO-KAP KITS®

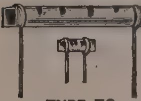
CRL Type TV-207—One TV-20 capacitor with 7 attachable terminals. Net Each.............................. $1.35

CRL Type TVK-5-50 –Five TV-20 capacitors with 10 each terminals in plastic box. Net Each..................... $6.75

FIXED TERMINAL HI-VO-KAPS®

Similar to TV-20, with fixed terminals. Rated 30 kv working, 45 kv test. TV1-503: 2-rod type. TV8-503: Two 8-32 male terminals.
CRL Type TV1-503 or TV8-503— Net Each.............................. $1.98

Centralab Ceramic Capacitors, Kits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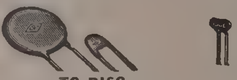
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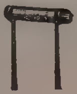
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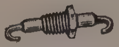
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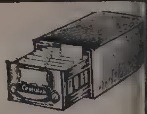

DDK-200

TEMPERATURE COMPENSATING TUBULAR HI-KAP® CAPACITORS

Especially designed to limit frequency drift in RF circuits where temperature variations are prevalent. Ceramic body construction changes capacities as the temperature varies; made to comply with JAN-C-20A specifications. Rated 1,200 volts DC, test; 600 volts DC, working. Extremely compact. Weight, 2 oz. **Type TCZ:** NPO or zero units, superior to micas for all uses. Show zero capacitance changeover temperature range −20° C to +85° C. Left end coded black. **Type TCN:** N750 units show negative capacity of −750 parts per million per degree C rise in temperature. Left end coded violet.

TYPES TCN AND TCZ

Cap., μμf	Type TCN Units				Type TCZ Units			
	CRL Number	Size †	Tol. ±	Net Each	CRL Number	Size †	Tol. ±	Net Each
0.5	....	....	.....	......	TCZ-R5	A	.25 μμf	30c
0.68	....	....	.....	......	TCZ-R68	A	.25 μμf	30c
1.0	....	....	.....	......	TCZ-1	A	.25 μμf	30c
1.5	....	....	.....	......	TCZ-1R5	A	.25 μμf	30c
2.2	....	....	.....	......	TCZ-2R2	A	.25 μμf	30c
3.3	TCN-3R3	A	.5 μμf	30c	TCZ-3R3	A	.25 μμf	30c
4.7	....	....	.....	......	TCZ-4R7	A	.5 μμf	30c
5.0	TCN-5	A	.5 μμf	30c	....	....	.....	......
6.8	....	....	.....	......	TCZ-6R8	A	.5 μμf	30c
10	TCN-10	A	.5 μμf	30c	TCZ-10	A	.5 μμf	30c
12	TCN-12	A	2%	30c	TCZ-12	A	2%	30c
15	TCN-15	A	2%	30c	TCZ-15	A	2%	30c
18	TCN-18	A	2%	30c	TCZ-18	A	2%	30c
20	TCN-20	A	2%	30c	TCZ-20	A	2%	30c
22	TCN-22	A	2%	30c	TCZ-22	A	2%	30c
24	TCN-24	A	2%	30c	TCZ-24	A	2%	30c
25	TCN-25	A	2%	30c	TCZ-25	A	2%	30c
27	TCN-27	A	2%	30c	TCZ-27	A	2%	30c
30	TCN-30	A	2%	30c	TCZ-30	A	2%	30c
33	TCN-33	A	2%	30c	TCZ-33	A	2%	30c
36	TCN-36	A	2%	30c	TCZ-36	A	2%	30c
39	TCN-39	A	2%	30c	TCZ-39	A	2%	30c
43	TCN-43	A	2%	30c	TCZ-43	B	2%	30c
47	TCN-47	A	2%	30c	TCZ-47	B	2%	30c
50	TCN-50	A	2%	30c	TCZ-50	B	2%	30c
51	TCN-51	A	2%	30c	TCZ-51	B	2%	30c
56	TCN-56	A	2%	30c	TCZ-56	B	2%	30c
62	TCN-62	A	2%	30c	TCZ-62	B	2%	30c
68	TCN-68	A	2%	30c	TCZ-68	B	2%	30c
75	TCN-75	A	2%	30c	TCZ-75	B	2%	30c
82	TCN-82	A	2%	30c	TCZ-82	B	2%	30c
91	TCN-91	A	2%	30c	TCZ-91	C	2%	30c
100	TCN-100	A	2%	30c	TCZ-100	C	2%	30c
110	TCN-110	B	5%	30c	TCZ-110	D	5%	45c
120	TCN-120	B	5%	30c	TCZ-120	D	5%	45c
130	TCN-130	B	5%	30c	TCZ-130	D	5%	45c
150	TCN-150	B	5%	30c	TCZ-150	D	5%	45c
160	TCN-160	B	5%	30c	TCZ-160	D	5%	60c
180	TCN-180	B	5%	30c	TCZ-180	D	5%	60c
200	TCN-200	B	5%	30c	TCZ-200	D	5%	60c
220	TCN-220	C	5%	30c	TCZ-220	D	5%	60c
240	TCN-240	C	5%	30c	TCZ-240	E	5%	60c
270	TCN-270	C	5%	30c	TCZ-270	E	5%	60c
300	TCN-300	D	5%	45c	TCZ-300	E	5%	60c
330	TCN-330	D	5%	45c	....	....	.....	......
360	TCN-360	D	5%	45c	....	....	.....	......
390	TCN-390	D	5%	45c	....	....	.....	......
430	TCN-430	D	5%	45c	....	....	.....	......
470	TCN-470	D	5%	60c	....	....	.....	......
510	TCN-510	D	5%	60c	....	....	.....	......
560	TCN-560	D	5%	60c	....	....	.....	......
620	TCN-620	E	5%	60c	....	....	.....	......
680	TCN-680	E	5%	60c	....	....	.....	......
750	TCN-750	E	5%	60c	....	....	.....	......

TYPES TCA AND TCL

Intermediate stock values. This group changes negatively capacity-wise with temperature increases. **Type TCA:** Changes 330 parts per million per degree C. **Type TCL:** Changes 1500 parts per million per degree C.

Cap., μμf	Type TCA Units				Type TCL Units			
	CRL Number	Size †	Tol. ±	Net Each	CRL Number	Size †	Tol. ±	Net Each
10	TCA-10	A	.5 μμf	30c	TCL-10	A	.5 μμf	30c
15	TCA-15	A	2%	30c	TCL-15	A	2%	30c
22	TCA-22	A	2%	30c	TCL-22	A	2%	30c
33	TCA-33	A	2%	30c	TCL-33	A	2%	30c
47	TCA-47	A	2%	30c	TCL-47	A	2%	30c
68	TCA-68	A	2%	30c	TCL-68	A	2%	30c
100	TCA-100	B	2%	30c	TCL-100	A	2%	30c

SIZE†

Key	Size, Inches	Key	Size, Inches	Key	Size, Inches
A	.400 x .200	C	.860 x .225	E	1.625 x .285
B	.690 x .200	D	1.165 x .285		

TEMPERATURE COMPENSATING DISC HI-KAPS®

Very popular unit that replaces mica types in all application High stability and small size, using TC ceramic dielectric materi Type DTZ is NPO or zero TC disc type. Type DTN is an N750 T type. Thickness: 5/32″ and 7/32″. Tolerance: ±5%.

TYPE DTN (N750)

CRL No.	Cap. μμf	Dia., In.	Net Each	CRL No.	Cap., μμf	Dia., In.	Net Each
DTN-5*	5	1/4	30c	DTN-68	68	3/8	30
DTN-10*	10	1/4	30c	DTN-75	75	3/8	30
DTN-15	15	1/4	30c	DTN-100	100	3/8	30
DTN-20	20	1/4	30c	DTN-150	150	9/16	30
DTN-22	22	1/4	30c	DTN-200	200	9/16	30
DTN-25	25	1/4	30c	DTN-220	220	9/16	30
DTN-33	33	1/4	30c	DTN-330	330	5/8	30
DTN-47	47	1/4	30c				

TYPE DTZ (NPO)

CRL No.	Cap. μμf	Dia., In.	Net Each	CRL No.	Cap. μμf	Dia., In.	Net Each
DTZ-1R5*	1.5	1/4	30c	DTZ-50	50	9/16	30
DTZ-2R2*	2.2	1/4	30c	DTZ-68	68	9/16	30
DTZ-3R3*	3.3	1/4	30c	DTZ-75	75	9/16	30
DTZ-4R7*	4.7	1/4	30c	DTZ-82	82	9/16	30
DTZ-6R8*	6.8	1/4	30c	DTZ-100	100	9/16	30
DTZ-10	10	1/4	30c	DTZ-120	120	5/8	36
DTZ-15	15	1/4	30c	DTZ-150	150	3/4	36
DTZ-20	20	1/4	30c	DTZ-180	180	9/16	36
DTZ-22	22	3/8	30c	DTZ-200	200	9/16	36
DTZ-25	25	3/8	30c	DTZ-220	220	5/8	36
DTZ-33	33	3/8	30c	DTZ-270	270	5/8	48
DTZ-47	47	9/16	30c				

*Tolerance, ±.5 μμf.

D6 TUBULAR BC HI-KAPS®

Rated 600 v. DC working; 1200 v., test. Tropicalized. Operati temperature 85° C. Tolerance: ±0.5 μμf, D6-030; ±10%, 5 μ through 680 μμf; ±20%, 750 μμf through 2200 μμf; GMV, 2500 and up.

CRL Type D6—Any model through 5000 μμf. Net Each... **15**

CRL Type D6—5600 μμf and up. Net Each.................. **33**

CRL No.	Cap., μμf	Size *	CRL No.	Cap., μμf	Size *	CRL No.	Cap., μμf	Si
D6-030	3	A	D6-910	91	A	D6-821	820	A
D6-050	5	A	D6-101	100	A	D6-102	1000	A
D6-100	10	A	D6-121	120	A	D6-122	1200	A
D6-120	12	A	D6-151	150	A	D6-152	1500	A
D6-150	15	A	D6-181	180	A	D6-182	1800	A
D6-180	18	A	D6-201	200	A	D6-202	2000	B
D6-200	20	A	D6-221	220	A	D6-222	2200	B
D6-220	22	A	D6-251	250	A	D6-252	2500	B
D6-250	25	A	D6-271	270	A	D6-272	2700	B
D6-270	27	A	D6-301	300	A	D6-302	3000	B
D6-330	33	A	D6-331	330	A	D6-332	3300	B
D6-390	39	A	D6-391	390	A	D6-402	4000	B
D6-400	40	A	D6-401	400	A	D6-472	4700	C
D6-470	47	A	D6-471	470	A	D6-502	5000	C
D6-500	50	A	D6-501	500	A	D6-562	5600	C
D6-560	56	A	D6-561	560	B	D6-682	6800	D
D6-680	68	A	D6-601	600	B	D6-752	7500	D
D6-750	75	A	D6-681	680	B	D6-103	10000	D
D6-820	82	A	D6-751	750	A			

***Size: A**—.260″ x .460″. **B**—.260″ x .790″. **C**—.280″ x .90 **D**—.330″ x 1.21″.

FT AND MFT FEED-THRU HI-KAPS®

Rated 500 v. DC, working; 1000 v. DC, test. **Type FT:** Hook end terminals; mounting nut supplied. **Type MFT:** 1/4″ (ma flange eyelet inserts in .160″ hole; solders direct to chassis.

CRL Type FT—Any model. Net Each..................... **60**

CRL Type MFT—Any model. Net Each.. **30**

Type FT Hi-Kaps ®			Type MFT Hi-Kaps ®		
No.	μμf	Tolerance	No.	μμf	Toleran
FT-500	500	±20%	MFT-50	50	±10
FT-1000	1000	±20%	MFT-100	100	±10
FT-1500	1500	−20, +50%	MFT-500	500	±20
FT-1800	1800	−20, +50%	MFT-1000	1000	GMV
FT-2300	2300	−20, +50%			

CERAMIC CAPACITOR KITS

Each kit contains a carefully balanced inventory of the m required replacement values. All kits utilize the sturdy, conveni Centralab ceramic capacitor packages. Housed in a 6″ x 4″ x 1 one drawer, heavy gauge steel cabinet. Entire contents labeled a marked for prompt identification.

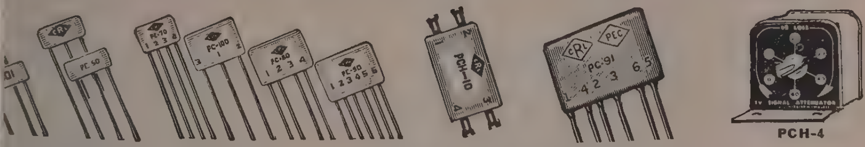
CRL Kit No. DDK-200—Contains 200 disc capacitors of 31 asso ed values, rated at 1 kv DCW. Values range from 5 μμf to 20,000 μμf. Net Each.................. **$31**

CRL Kit No. D6K-200—Contains 200 tubular capacitors of assorted values, rated at 600 VDCW. Values range from 5 μμf to 10,000 μμf. Net Each.................. **$33**

CRL Kit No. HVK-150—Contains 150 high voltage capacitor 17 assorted values, rated at 1.6 kv, 3 kv, and 6 kv. Values range from 47 μμf to 15,000 μμf. Net Each.......... **$38**

CRL Kit No. TCK-80—Contains 80 temperature compensat capacitors of 28 assorted values, rated at 600 VDCW. Values range from .68 μμf to 750 μμf. Net Each....... **$26**

ntralab Packaged Electronic Circuits



PCH-4

GED ELECTRONIC CIRCUITS

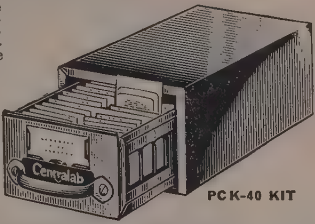
Type	Net Ea.
Single Resistor	60c
Dual Resistor	60c
Resistor-Capacitor	60c
Resistor-Capacitor	60c
Resistor-Capacitor	60c
Resistor-Capacitor	60c
Diode Load Filter	60c
Diode Load Filter	60c
Diode Load Filter	60c
Resistor-Capacitor	60c
Resistor-Capacitor	60c
Couplate*	60c
Couplate*	60c
Couplate*	60c
Couplate*	60c
Special	60c
Couplate*	60c
Pentode Couplate*	75c
Pentode Couplate*	75c
Pentode Couplate*	75c
Vertical Integrator	75c
Vertical Integrator	75c
Vertical Integrator	75c
Vertical Integrator	75c
Vertical Integrator	75c
Television IF Filter	60c
Television IF Filter	60c
Audio Detector Couplate*	75c
Audio Detector Couplate*	75c
Audio Detector Couplate*	75c
Audio Detector Couplate*	75c
Audio Detector Couplate*	75c
Audio Detector Couplate*	75c
Pentode Detector Couplate*	90c
Pentode Detector Couplate*	90c
Pentode Detector Couplate*	90c
Special	60c
Special	75c
Special	75c
Special	60c
Special	75c
Special	75c
Special	75c
Special	75c
Special	75c
Sync. Take-off Couplate*	75c
Sync. Take-off Couplate*	75c
Sync. Take-off Couplate*	75c
Sync. Take-off Couplate*	75c
Special	75c
Special	90c
Special	75c
Special	60c
Horizontal Oscillator	75c
Retrace-Suppress Couplate*	75c
Audio Couplate*	75c
Vertical Feed-back	75c
Vertical Integrator	75c
Audio Detector Couplate*	75c
Retrace-Suppress Couplate*	75c
Audio Detector Couplate*	75c
Sync. Take-off Couplate*	90c
Audio Couplate*	60c
Pentode Detector Couplate*	90c
Phase Comparator	60c
Special	75c
Special	60c
Special	75c
Special	75c
Special	75c
Special	75c
Diode Load Filter	60c
Pentode Detector Couplate*	90c
Pentode Detector Couplate*	90c
Special (Similar to PC-179)	75c
Sync. Take-off Couplate*	75c
Audio Detector Couplate*	75c
Special	75c
Special	75c
Special	60c
Retrace Suppression	75c
Phase Comparator	75c
Sync Time-K Network	75c
Sync Time-K Network	75c
AGC Voltage Divider	75c
RC Combination	60c
FM Ratio Detector	90c
Diode-Pentode Couplate*	90c

ered Trade Mark.

E FOR CIRCUIT DIAGRAMS
SPECIFICATIONS ON ABOVE
D PACKAGED CIRCUITS.

PACKAGED ELECTRONIC CIRCUIT KIT

Packaged with each kit is a copy of the current 16-page Packaged Electronic Circuit Guide listing all PEC♯ circuits available to the replacement market, a schematic of each, and a cross reference to the set manufacturer's part number.



PCK-40 KIT

KIT CONTAINS

Quan.	Part No.	Quan.	Part No.
2	PC-81	5	PC-150
2	PC-91	2	PC-151
10	PC-100	2	PC-158
5	PC-101	2	PC-159
2	PC-104	2	PC-160
2	PC-105	2	PC-165
2	PC-106		

Metal Cabinet Shop-Pak No. PCK-40—Contains 40 PEC♯ packaged circuits, 13 of the most frequently used types. Includes the equivalent of 123 ceramic based resistors and 153 ceramic capacitors. All PEC♯ circuits are packaged in a reusable plastic crush-proof package. Complete assortment is housed in a heavy gauge steel single drawer cabinet, 4" x 6" x 11". All dividers and packages are clearly labeled for easy identification.
CRL No. PCK-40—Net Each **$30.80**
♯Trade Mark, packaged circuit.

TYPE RC TUBE-R-CAPS®

Radial lead ceramic tubular capacitor and resistor in parallel in the same space as a tubular capacitor alone.

CRL No.	Capacitor		Resistor			Size, In. Dia. x L.	Net Each
	μμf	Tolerance	Ohms	Tolerance	Rating		
RC-421	56	±10%	47K	±20%	¼ watt	.260 x .503	**18c**
RC-428	150	GMV	3.3 meg.	±30%	½ watt	.260 x .790	**18c**
RC-431	330	±20%	220K	±20%	½ watt	.260 x .790	**18c**
RC-465	470	±20%	470K	±20%	¼ watt	.260 x .503	**18c**
RC-471	470	GMV	3-1 meg.	....	½ watt	.280 x .910	**18c**
RC-476	800	GMV	22K	±20%	¼ watt	.260 x .503	**18c**
RC-485	4700	+80, −20%	180	±20%	¼ watt	.260 x .790	**18c**
RC-490	4700	+80, −20%	.75-1.5 meg.	....	½ watt	.330 x .910	**18c**

PCH-4 TV ATTENUATOR SWITCH

Printed electronic circuit H-Pads. Balances signal strength from unusually close TV station. Designed as a service tool to determine the amount of attenuation required to secure best TV reception; also valuable for permanent installation. Correct matching improves both audio and video reception. Eliminates interference. Matches impedance between antenna and receiver. Six switching positions: From regular antenna to a 60 db loss. Gray crackle finish. 2¾" d. x 2½" sq. face.
CRL No. PCH-4—Complete with knobs, leads and mounting bracket-dial plate. Net Each **$6.00**
Separate H-pads, **PCH-10,** 10 db; **PCH-20,** 20 db; **PCH-30,** 30 db; **PCH-40,** 40 db. Any one pad, Net Each **90c**

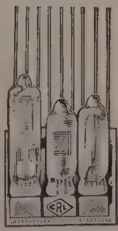
TELEVISION H-PADS

These PCH units are especially designed for use in television antenna installations where signal strength needs attenuation to secure optimum performance. H-Pads have four terminals and are for installations in series with the standard 300 ohm antenna. Size, 1¼" x ¹³⁄₁₆" x ³⁄₁₆" thick. Solder terminals, ⁹⁄₃₂" long.

CRL No.	Attenuation Rating	CRL No.	Attenuation Rating	Net Each
PCH-10	10 db.	**PCH-30**	30 db.	**90c**
PCH-20	20 db.	**PCH-40**	40 db.	

CRL No. PCH-100—Set of four H-Pads, one each of above, in plastic box. Net Per Set **$3.60**

AMPEC® MINIATURE AUDIO AMPLIFIERS (VACUUM TYPE)



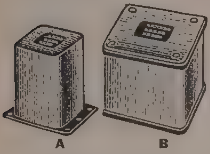
MODEL II. A complete three-stage amplifier. Includes complete electrical service from input to output. All wiring, capacitor, resistors and tube sockets are intimately bonded to a steatite "chassis", size 1⁹⁄₃₂" x 1⁵⁄₃₂" x ⁵⁄₁₆" thick over tube sockets. Capacitors 150 VDCW, 300 v. DC flash test. Resistors 1/5 watt. Base plate meets JAN Grade L-5 specifications. Operates on 15-67½ v. "B" supply, 1.5 v. "A". At 1000 cps, gain 4500. Frequency response, 300-5000 cps. Uses 2-CK512AX and 1-CK548DX tubes.
CRL No. PC-201—Complete with three Raytheon tubes. Net Each **$15.00**
CRL No. PC-200—Less tubes. Net Each **$9.00**

MODEL III. An even smaller three-stage amplifier than the Model II above, and with additional circuits built in. Same specifications as above, but also has a tone control circuit with provision for a switch (not included) and is available in two models, either a grid bias or a zero bias output model. Size is only 1³⁄₃₂" x ¹⁵⁄₁₆" x ¹¹⁄₃₂" thick over tube sockets. Recommended tone switch is G-C No. 1355 or Insuline No. 1257 (Canopy), SPST slide switches.
CRL No. PC-203—Zero Bias model. Complete with 2-CK549DX and 1-CK547DX tubes. Net Each **$19.20**
CRL No. PC-202—Same without tubes. Net Each **$10.50**
CRL No. PC-205—Grid Bias model. Complete with 2-CK549DX and 1-CK548DX tubes. Net Each **$20.10**
CRL No. PC-204—Same without tubes. Net Each **$10.50**

173X-59B

Special Purpose Transformers

ACROSOUND ULTRA-LINEAR TRANSFORMERS



Acrosound ultra-linear transformers are made of the finest grade materials; specially shaped laminations, special potting materials, uniform windings. Designed for lowest possible distortion at all frequencies and all power levels; allowing more stable feedback and good transient response. AC balance is guaranteed to 1%. Each transformer is subjected to extensive tests. Performance ratings are conservative.

NOTES

*All models available with **additional** line winding (125 and 500 ohms) at extra cost of $6.00 net for models with numbers up to TO-320 and $10.00 net for models TO-330 and TO-350. Models with line winding are designated by model numbers ending in "5". For example, Model TO-300 with additional line winding is specified as TO-305.

†All cases are furnished with silver gray hammerloid finish. 10-inch color coded wire leads are brought out through case bottoms.

Case type "A" (3⅝" x 3¼" x 4¼") mounts with base flange. Case type "B" (4" x 4⅝" x 5⅜") has provision for either top or bottom mounting.

Acro Model	Impedances* Ohms	Power Rating	Freq. Resp.	Application	Pri. Cur. Per Tube	Permis. DC Pri. Unbal.	Case Type †	Wt., Lbs.	Net Eac
TO-230	3000 plate-to-plate 4, 8, 16 secondary	20 watts—20-20,000 cps 40 watts—30-15,000 cps	±1 db 10 cps to 40 kc	For use with 6B4's or 2A3's fixed bias pp par. 6L6's, etc.	150 ma	20%	A	7	$14.5
TO-250	5000 plate-to-plate 4, 8, 16 secondary	10 watts—20-20,000 cps 20 watts—30-15,000 cps	±1 db 10 cps to 40 kc	For use with 6B4's or 2A3's self bias, 6L6's, class A, etc.	75 ma	10%	A	6	11.7
TO-270	10,000 plate-to-plate 4, 8, 16 secondary	10 watts—20-20,000 cps 20 watts—30-15,000 cps	±1 db 10 cps to 40 kc	For use with 6V6's, 6K6's, etc.	75 ma	10%	A	6	11.7
TO-280	9000 plate-to-plate 4, 8, 16 secondary	20 watts—20-20,000 cps 40 watts—30-15,000 cps	±1 db 10 cps to 40 kc	For use with 6L6's, class AB1	75 ma	10%	A	7	14.5
TO-290	12,000 plate-to-plate 4, 8, 16 secondary	20 watts—20-20,000 cps 40 watts—30-15,000 cps	±1 db 10 cps to 40 kc	For use with triode connected 807's or 5881's in Williamson type circuit	75 ma	10%	A	7	15.7
TO-300	6600 plate-to-plate 4, 8, 16 secondary	20 watts—20-30,000 cps 40 watts—30-20,000 cps	±1 db 10 cps to 100 kc	For Ultra-Linear KT-66's, 807's, 5881's, 1614's and 6L6's, Ultra-Linear Williamson type circuits	75 ma	15%	A	7	24.7
TO-310	8000 plate-to-plate 4, 8, 16 secondary	10 watts—20-30,000 cps 20 watts—30-20,000 cps	±1 db 10 cps to 100 kc	For Ultra-Linear operation of 6V6's or EL-84's	75 ma	10%	A	6	18.7
TO-320	3500 plate-to-plate 4, 8, 16 secondary	10 watts 20-30,000 cps 20 watts—30-20,000 cps	±1 db 10 cps to 100 kc	For Ultra-Linear operation of 6Y6's	75 ma	10%	A	6	18.7
TO-330	3800 plate-to-plate 4, 8, 16 secondary	50 watts—20-30,000 cps 100 watts—30-20,000 cps	±1 db 10 cps to 100 kc	For p-p Ultra-Linear 6550's, EL-34's, 6CA7's or for p-p par. KT-66's, 807's, etc.	150 ma	15%	B	14	39.7
TO-340	5000 plate-to-plate 4, 8, 16 secondary	50 watts—20-30,000 cps 100 watts—30-20,000 cps	±1 db 10 cps to 100 kc	For p-p Ultra-Linear 6550's, KT-88's, in self-bias operation	150 ma	15%	B	14	39.7
TO-350	6600 plate-to-plate 4, 8, 16 secondary	100 watts—20-20,000 cps	±1 db 7 cps to 70 kc	For Ultra-Linear operation of 6146 tubes using tertiary winding for screen connection	175 ma	10%	B	14	49.5

TRIAD SPECIAL PURPOSE TRANSFORMERS, CASE SIZES

PHOTO-FLASH TRANSFORMERS

Especially developed for electronic flash equipment.

Triad No. VR-30Z—From 115 v., 60 cycle line or 4 volt, 180 cycle vibrator to 385 v. rms at 14 ma; 2⅝" h. x 3 5/16" w. x 2⅛" d. Weight, 1½ lbs. Net Each............................**$4.71**

Triad No. PL-10—Trigger coil has 1:30 turn ratio; ¾" h. x ⅝" dia. Weight, 1½ oz. Net Each............................**$1.17**

SELENIUM RECTIFIER TRANSFORMERS

PRIMARY 60 CYCLES

Triad No.	Pri. Volts	Secondary		DC Volts		Case Size, Inches H x W x D	Net Each
		AC Volts	Amps RMS	Half Wave	Full Wave		
F-47U	115	17-18	3	6-7	13-14	3 x2½ x2⅞	**$ 6.15**
F-48U	115	17-18	6	6-7	13-14	3¾x3⅛ x3⅝	**9.09**
F-49U	115	36 36	3 3	13	26	4½x3¾ x4	**13.98**
F-60U	115	6.5-13-19.5-26	3 (Int.)	9	18	3⅜x2 13/16x3⅛	**6.99**
F-61U	115	24-27-30-33-36	3	13	26	3¾x3⅛ x3⅝	**10.14**
F-67U	110-120	24-27-30-33-36	8	13	26	4 9/16x3¾ x3¾	**15.30**
F-63U	115	8-9 8-9	2 2	.....	6-7	3 1/16x2½ x2⅜	**6.00**
F-64U	115	7-8-9	7	.....	6-7	3 7/16x2 13/16x2¾	**7.20**
F-62U	105-115-125	9 9 9 9	10 10 10 10	.....	6-7 Ea. Wdg.	4 9/16x3¾ x5¾	**19.20**
F-68U	115	9 CT 9 9 9	3.5 3.5 3.5 3.5	.....	6-7 Ea. Wdg.	3¾x3⅛ x3	**9.90**
F-65U	110-120	140-150-160	.75	60	115	3¾x3⅛ x3¾	**11.19**
F-66U	110-120	140-150-160	2.5	60	115	5 5/16x4⅜ x5	**27.00**
F-79U	115	24-26-28-30	15	.....	22.8	4⅝x3 13/16x5	**22.50**
F-80U	115*	18-18	20-20	.....	10	4⅜x5¼ x5¾	**44.70**
F-84AC	230-115	12-12	10-10	.....	8	4⅝x3 15/16x4¾	**18.90**
R-93A	110-120	150-160 170†-6.3	....	250 ma‡	6	4¼x3 19/32x4⅞	**14.10**

*Tapped. †500 ma DC. ‡DC voltage doubler circuit.

PULSE TRANSFORMERS

Triad No.	Pulse Volts Per Winding	Pulse μsec.	Max.Duty Ratio	Imped. Ohms	Case Size*	Net Each
PL-4	100-100	.54-.66	.01	500	1	$10.3
PL-5	100-100-100	.36-.54	.01	2000	2	12.4
PL-6	100-100-100	.36-.54	.01	2000	3	12.4

*CASE SIZES FOR TRIAD TRANSFORMERS

Case Type	Dimensions, Inches							Weigh Lbs.
	A	B	C	D	E	G	I	
AF	¾	¾	1⅛	27/32	......	....	4-40	1¼ o
AG	1	1 3/32*	1⅜	1 1/32	......	....	6-32	2½ o
AH	1 5/16	1 11/32*	1¾	1¼	......	⅜	6-32	4 oz.
AJ	1⅝	1⅝	2⅜	1 3/16	1 3/16†	⅜	6-32	9 oz.
EA	1 13/16	1 15/16	2¾	1⅜	1¼	⅜	6-32	1
EB	1 13/16	1 15/16	2 7/16	1⅜	1¼	⅜	6-32	15 oz
FA	2 1/16	2 5/16	3⅛	1 11/16	1 7/16	⅜	6-32	1¾
FB	2 1/16	2 5/16	2½	1 11/16	1 7/16	⅜	6-32	1½
GA	2⅜	2¾	3 11/16	2⅛	1¾	⅜	6-32	2
GB	2⅜	2¾	2 13/16	2⅛	1¾	⅜	6-32	1¾
GP-1	⅞	1⅛*	1 11/16	1 3/32	......	....	....	3 oz.
GP-2	1 1/16	1 11/32	2¼	1 3/16	......	....	....	5½ o
GP-3	1¼	1 9/16	2⅜	1 15/32	......	....	....	8 oz.
GP-4	1 7/16	1¾	2½	1½	......	....	....	12 oz
GP-5	1⅝	2	2¾	1½	......	....	....	17 oz
GP-15	5⅞	4¾	6 ⅝	4⅞	3¾	....	....	22
HA	2⅝	3 1/16	4¼	2 19/64	1 55/64	⅜	8-32	2½
HB	2⅝	3 3/16	3 5/16	2 19/64	1 55/64	⅜	8-32	2¼
JA	3 1/16	3 9/16	4⅞	2⅝	2⅛	⅜	8-32	4½
JB	3 1/16	3 9/16	3⅞	2⅝	2⅛	⅜	8-32	4
JOA	15/16‡	......	1 13/32	9/16	......	....	....	2 oz.
JOB	15/16‡	......	1 25/32	9/16	......	....	....	2½ o
JZ	9/16‡*	......	25/32■	......	......	....	....	5 oz.
KA	3⅜	3 15/16	5¼	3	2 7/16	½	10-32	7¾
KB	3⅜	3 15/16	4 5/16	3	2 7/16	½	10-32	7
LA	3 11/16	4 5/16	5 9/16	3 5/16	2 11/16	½	10-32	9¼
LB	3 11/16	4 5/16	4½	3 5/16	2 11/16	½	10-32	8½
MA	4	4 11/16	6	3 11/16	3	⅝	¼-20	13½
MB	4	4 11/16	4 15/16	3 11/16	3	⅝	¼-20	12½
NA	4 5/16	5 1/16	6 13/16	4 1/16	3 5/16	⅝	¼-20	18
NB	4 5/16	5 1/16	5½	4 1/16	3 5/16	⅝	¼-20	16
1	13/32‡	......	⅝	......	......	....	....	.....
2	½‡	......	11/16	......	......	....	....	.....
3	11/16‡	......	¾	......	......	½	....	.....
4	1 1/16	11/16	1 3/32	25/32	......	....	....	.....
5	1⅞	9/32	1 53/64	9/16	......	9/32	6-32	.....
6	1 9/16	1⅛	1¾	1	......	....	....	.....

A—Width. **B**—Overall depth. **C**—Height. **D and E**—Center-t center mounting studs. **G**—Stud length. **I**—Stud threadin *Not in conformance with MIL specifications. †On 2-stud versio studs spaced 1⅝". ‡Diameter.

Miniature Transformers

AUDIO, POWER AND TRANSISTOR TRANSFORMERS

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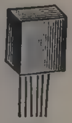
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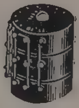
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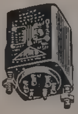
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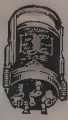
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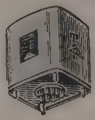
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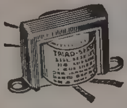
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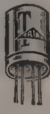
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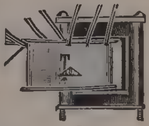
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EPOXY MOLDED TOROID TRANSFORMERS

sistor power supplies. Toroidal construction reduces noise, weight; increases efficiency and life. May be stacked on a ounting bolt. Exceeds requirements for grade 5, class R specified in MIL-T-27A.

Input Volts	Output Volts	Output Ma	Size, Inches Dia.	Size, Inches Height	Wt. Lbs.	Net Each
12.6	250	100	1¾	11/16	.35	$10.41
12.6	300	200	1¾	1	.35	11.10
12.6	325	150	1¾	1	.35	11.61
12.6	375	200	2	1	.50	12.51
12.6	450	150	2	1	.50	12.90
12.6	600	200	2¾	1⅜	1.00	15.00
28	250	80	1 5/16	9/16	.25	10.41
28	300	100	1¾	11/16	.35	10.80
28	325	200	1¾	1	.35	11.64
28	375	200	2	1	.50	12.51
28	450	200	2	1	.50	13.11
28	600	200	2¾	1⅜	1.00	15.30
6	300	100	1¾	1	.35	11.10
6	325	150	2	1	.50	11.61
6	375	200	2¾	1⅜	1.00	12.51
6	450	150	2¾	1⅜	1.00	13.11

RANSISTOR POWER SUPPLY TRANSFORMERS

olt systems; permit DC to DC conversion in small volume fficiencies when used with transistor oscillators and silicon

DC Volts From Rect.	Max. DC Ma	Size, Inches H. x W. x D.	Net Each
250	65	1¾ x 1¾ x 1 11/32	$6.18
300	100	1⅞ x 2⅜ x 1⅞	8.01
325	150	2 x 2⅜ x 2 7/16	8.07
375	200	2 x 2⅜ x 2 7/16	9.18
600	200	2 x 4⅛ x 3	9.99

paced 3¾" apart; all others 1½" apart.

"RED SPEC" TRANSISTOR TRANSFORMERS

ec" transistor transformers meet the demand for micro-e transformer designs, comparable in size to the transistors ich they are used. "Specs" have a volume of .05 cubic d a parts density of 34,500 per cubic foot. Printed circuit g or chassis wiring, with leads spaced 1/10" to fit standard Laminated core structures. **Size:** .310" x .390" x .440" h. 1/10 oz.

Application	Impedance, Ohms Primary	Impedance, Ohms Secondary	Net Each
Input	200000 CT	1000 CT	$7.00
Input	50000 CT	1000 CT	6.75
Input	200000	1000	6.50
Interstage	20000/30000	800/1200	6.00
Interstage	20000/30000 CT	800/1200 CT	6.50
Interstage	10000/12000 CT	1500/1800 CT	6.50
Driver	10000/12000 CT	1200/1500 CT	6.10
Driver	10000/12000 CT	2000/2500 CT	6.10
Driver	10000/12000 CT	500/600 CT	5.75
Output	500/600	50/60	5.40
Output	1000/1200	50/60	5.40
Output	600	3.2	5.40
Output	1200	3.2	5.40
Output	10000	3.2	5.65
Output	150/200 CT	12/16	5.55
Output	300/400 CT	12/16	5.55
Output	600/800 CT	12/16	5.55
Output	1000/1330 CT	12/16	5.55
Output	1500/2000 CT	12/16	5.55
Output	7500/10000 CT	12/16	6.00
Output	300 CT	600	5.55
Output	500 CT	600	5.55
Output	900 CT	600	5.55
Output	1500 CT	600	5.55
Output	120/150 CT	3.2/4	5.40
Output	320/400 CT	3.2/4	5.40
Output	600/750 CT	3.2/4	5.75
Output	800/1000 CT	3.2/4	5.75
Output	1200/1500 CT	3.2/4	5.75
Output	1600/2000 CT	3.2/4	5.75
Output	8000/10000 CT	3.2/4	6.00
Output*	10000 CT	10000 CT	7.00
Choke	6 hy @ 2 ma	....	5.45
Choke	1.25 hy @ 2 ma	....	4.80
Choke	3.5 hy @ 2 ma	....	4.80
Choke	.3 hy @ 4 ma	....	4.65

on.

pes: Suffix letter (s) of Triad No. indicates case style. transformer is indicated by prefix letter (s). Case sizes not individual sections may be found on another page.

TRANSISTOR TRANSFORMERS

Triad No.	Impedance, Ohms Primary	Impedance, Ohms Secondary	Maximum Level	Net Each
JZ-7	30/12/4	1000	−10 dbm	$11.79
TZ-7	30/12/4	1000	−10 dbm	3.27
TY-66A	6 CT (5 a.)	6K/4K/3K	40 w.	9.09
TY-67A	6 CT (5 a.)	16/8/4	40 w.	9.33
TY-64X	32 CT (575 ma)	16/8/4	10 w.	3.66
TY-65Z	32 CT (575 ma)	6K/4K/3K	10 w.	3.66
TY-63X	48 CT (.55 a. bal.)	16/8	5 w.	3.99
TY-48X	100 CT (40 ma)	16/8/4	500 mw	3.96
TY-61X	100 (100 ma)	100 CT	500 mw	2.91
TY-46X	100 (100 ma)	1000 CT	250 mw	2.55
TY-58X	125 CT (15 ma)	8/4	200 mw	3.51
TY-53X	200 CT (10 ma)	400 CT	600 mw	3.33
TY-57X	250 CT (10 ma)	16/8/4	200 mw	3.51
TY-27XT	500 CT (2 ma)	500 CT	10 dbm	3.75
TY-28XT	500 CT (2 ma)	200 CT	10 dbm	3.75
TY-45X	500 CT (5 ma)	16/8/4	200 mw	3.75
TY-49X	500 CT (12 ma)	5000 CT	30 mw	2.79
JZ-26	1000 (5 ma)	50	−10 dbm	11.46
TZ-26	1000 (5 ma)	50	−10 dbm	3.12
T-41X	1000 (10 ma)	200 CT	0 dbm	3.90
TY-44X	1000 (10 ma)	16/8/4	200 mw	3.75
TY-47X	2000 CT (10 ma)	16/8/4	200 mw	3.96
TY-55X	2000 CT (2 ma)	500 CT	200 mw	4.17
TY-51X	2000 CT (10 ma)	200 CT	50 mw	3.96
JAF-33	5000 CT	5000 CT	10 dbm	14.16
T-33X	5000 CT	5000 CT	10 dbm	4.02
TY-59X	5000 CT (1 ma)	50000 CT	200 mw	4.59
T-42X	9800 (2 ma)	16	20 dbm	3.90
TY-62X	10000 (2 ma)	4	20 dbm	3.48
TY-56X	10000 (1 ma)	2000 CT	50 mw	4.17
TY-54X	15000 (1.5 ma)	200 CT	100 mw	4.08
JZ-15	20000 (0.5 ma)	1200/600/100	−10 dbm	11.79
TZ-15	20000 (0.5 ma)	1200/600/100	−10 dbm	3.84
TY-52X	20000 CT (1 ma)	2000 CT	100 mw	4.29
TY-50X	125000	2000 CT	40 mw	4.56
TY-60X	200000	1000	−10 dbm	4.32

MIDGET "TRIJET" AUDIOS—HERMETICALLY SEALED

All units have 45 db shielding. Std. threaded stud mounting plus optional bracket (1¼" mtg.). Conform to MIL specs.

Triad No.	Impedance, Ohms Primary	Impedance, Ohms Secondary	Frequency Response	Net Each
JO-1§	600/250/50	50000	50-15000	$13.14
JO-2§	600/250/50	250000	150-7000	13.92
JO-3§	600/250/50	60000 CT	50-15000	13.92
JO-5§	30/12/4	50000	50-12000	13.92
JO-11	15000	60000	50-15000†	13.32
JO-12	15000	60000 CT	50-15000†	13.74
JO-13	15000*	95000 CT	300-7000†	13.74
JO-21	15000	600/250/50	50-15000†	13.74
JO-22	15000*	600/250/50	300-7000†	13.74
JO-23	20000 CT	600/250/50	50-15000†	13.92
JO-31	600/250/50	600/250/50	50-15000†	13.74
JO-101	50 hys @ 2 ma coupling reactor			12.60

MIDGET "TRIJET" AUDIOS—UNCASED

Open frame construction, 11/16" dia. x 11/16" h. overall.

T-1X	600/250/50	50000	60-15000	$4.32
T-2X	600/250/50	250000	100-5000	4.32
T-3X	600/250/50	60000 CT	60-15000	4.32
T-5X	30/12/4	50000	60-15000	4.32
T-11X	15000	50000	60-15000†	4.02
T-12X	15000	60000 CT	60-15000†	4.32
T-13X	15000*	95000 CT	350-7000†	3.96
T-20X	15000	600/250/50	60-15000†	4.05
T-21X	30000	50	60-15000†	3.87
T-22X	15000*	600/250/50	350-7000†	3.87
T-23X	20000 CT	600/250/50	60-15000†	4.02
T-31X	600/250/50	600/250/50	60-15000†	4.02
T-33X	5000 CT	5000 CT	60-15000†	4.02
T-101X	50 hys @ .75 ma coupling reactor			3.33

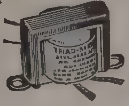
MINIATURE JAF AUDIOS—HERMETICALLY SEALED

Hermetically sealed in "Trialloy" to meet MIL-T-27A spec's.

Triad No.	Impedance, Ohms Primary	Impedance, Ohms Secondary	Frequency Response	Net Each
JAF-1	600/250/50	50000	60–15000	$13.20
JAF-2	600/250/50	250000	150–7000	13.74
JAF-3	600/250/50	60000 CT	60 15000	13.74
JAF-5	30/12/4	50000	60–12000	13.74
JAF-11	15000	50000	60–15000†	12.84
JAF-12	15000	60000 CT	60–15000†	13.20
JAF-13	15000*	95000 CT	350–7000†	13.74
JAF-14	200	½ megohm	350–5000	13.74
JAF-15	15000	1 megohm	350–5000†	13.74
JAF-21	15000	600/250/50	60 15000†	13.20
JAF-22	15000*	600/250/50	350 7000†	13.20
JAF-23	20000 CT	600/250/50	60–15000†	13.74
JAF-31	600/250/50	600/250/50	60–15000†	14.16
JAF-33	5000 CT	5000 CT	60–15000†	14.16
JAF-101	50hys @ .75ma	Coupling Reactor		12.60

*Designed for 3 ma in primary; low freq. loss results from DC in primary of other units. †Max. level 10 dbm, all others 0 level. JO Size: §1 13/16" x 15/16" dia.; all others: 1 25/32" x 15/16".

Audio Transformers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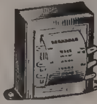
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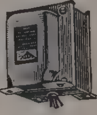
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SUBMINIATURE AUDIO TRANSFORMERS

Can-type case 9/16" dia. x 25/32" long; wire leads. Hermetically sealed.

Triad No.	Application	Impedance, Ohms		Net Each
		Primary	Secondary	
JZ-1	Mike or line to grid	600/250/50	60000	**$11.79**
JZ-5	Dyn. mike, VC, to grid	30/12/4	50000	**12.12**
JZ-7	Dyn. mike, VC to xsistor	30/12/4	1000	**11.79**
JZ-13	Plate to sgle. or p-p grid, DC in pri.	15000 (1 ma)	135000 CT	**11.79**
JZ-15	Transistor interstage, emitter to collector	20000 (.5 ma)	1200/600/. 100	**11.79**
JZ-25	Tube to line, DC pri.	10000 (1 ma)	200	**11.46**
JZ-26	Xsistor to VC, DC pri.	1000 (5 ma)	50	**11.46**

POWER OUTPUT TO LINE AND VC—HERMETICALLY SEALED

Frequency response, 150-15,000 cps. Conform to MIL-T-27A specifications.

Triad No.	Impedance, Ohms		Max. Watts	Case Key*	Net Each
	Primary	Secondary			
HS-71	10000 (10 ma)	600/150	2	AH	**$14.40**
HS-73	5000 (40 ma)	4/8/16/250/500	5	AJ	**15.42**
HS-75	10000 CT (50 ma bal.)	4/8/16/250/500	10	EB	**18.18**
HS-77	9000 CT (120 ma bal.)	4/8/16/250/500	25	GA	**21.18**

LOW FREQUENCY TRANSISTOR GEOFORMERS

Especially designed for low frequency instrumentation. Meet Triad's same high standards as outlined for standard Geoformers on another page herein. Case Type GP-1F, 1¾" h. x 1 7/64" w. x 59/64" d.

Triad No.	Impedance, Ohms		Min. Pri. Ind., Ohms*	Frequency Res., Cps @ 5 DC Ma Sec. Cur.†	Net Each
	Primary	Secondary			
G-18	1K or 250	125 or 31	60	−3 db, 7-20,000	**$19.98**
G-19	1K or 250	1K or 250	65	−3 db, 20-7,000	**19.98**
G-30	1000 CT	2500 CT	20	−3 db, 70-8,000	**17.97**

*At 100 mv, 60 cps with no unbalanced DC current. †Primary signal of 1 v. unbalanced DC; Freq. response slightly better with lower current.

HI-FI AUDIO TRANSFORMERS

SEALED HIGH FIDELITY HIGH LEVEL OUTPUTS

Triad No.	Impedance		Max. Level Watts	Case* Key	Net Each
	Primary	Secondary			
HSM-79*	20000 CT (20 ma) or 5000 (40 ma)	16/8/4	5	FA	**$19.50**
HSM-80*	20000 CT (20 ma) or 5000 (40 ma)	500/250 CT or 125/62.5	5	FA	**21.30**
HSM-81‡	8000 CT Split primary	16/8/4	15	JB	**23.58**
HSM-82‡	8000 CT	500/250/125	15	JB	**23.58**
HSM-181†‡	8000/2000 CT Split primary	16/8/4	15	JB	**23.58**
HSM-182†‡	8000/2000 CT Split primary	500/250/125	15	JB	**23.58**
HSM-84 ‡	5000 CT	16/8/4	20	JB	**23.58**
HSM-85 ‡	5000 CT	500/250/125	20	JB	**23.58**
HSM-189†‡	10000/2500CT Split primary	16/8/4	25	KB	**30.00**
HSM-190†‡	10000/2500CT Split primary	500/250/125	25	KB	**30.00**
HSM-186†‡	6600 CT Split primary	16/8/4	25	KB	**30.00**
HSM-187†‡	6600 CT Split primary	500/250/125	25	KB	**30.00**
HSM-91‡	2500 CT	16/8/4	50	LA	**39.30**
HSM-94‡	4500 CT	16/8/4	55	LA	**43.62**
HSM-95‡	4500 CT	500/250/125	55	LA	**43.62**
HSM-192†‡	4000 CT Split primary	16/8/4	65	LA	**45.00**
HSM-193†‡	4000 CT Split primary	500/250/125	65	LA	**45.00**
HS-97‡‡	6600 CT	500/250/125	125	Spec.	**82.20**

*Frequency response 50-25,000 cps. ‡Frequency response 7-50,000 cps. ‡‡Frequency response 10-30,000 cps. †Williamson type circuit. Proper taps on primary for screen operation.

*See case size table elsewhere.

Case Types: Suffix letter (s) of Triad No. indicates case style. Type of transformer is indicated by prefix letter (s). Case dimensions not listed in individual sections may be found on another page.

HIGH FIDELITY HIGH LEVEL AUDIO OUTPUTS

All units feature linear response within 3 db from 20-2000
Minimum phase shift allows up to 30 db inverse feedback.

Triad No.	Impedance, Ohms		Output Watts	Case Size, Inches H. x W. x D.	Wt., Lbs.
	Primary	Secondary			
S-34X	4000 CT	32/16/8	7.5	2 9/32x3 11/16x2⅜	1½
S-31A	8000 CT	16/8/4	15	3⅛x2⅝x3⅜	3½
S-32A	8000 CT	500/250/125	15	3⅛x2⅝x3⅜	3½
S-142A†	8000 CT	16/8/4	15	3⅛x2⅝x3⅜	3½
S-35A	5000 CT	16/8/4	20	3⅛x2⅝x3⅝	4
S-36A	5000 CT	500/250/125	20	3⅛x2⅝x3⅝	4
S-146A†	66000 CT	16/8/4	25	3½x3 x4¼	5¾
S-148A†	1000 CT	16/8/4	25	3½x3 x4¼	5¾
S-42A	4500 CT	16/8/4	50	4¼x3⅝x4⅝	9
S-152A†	4000 CT	16/8/4	65	4¼x3⅝x4⅝	9
SR-45Z*	4000/2000/ 1000/500	16/8/4	10	2 11/16x3⅛x2¼	1¾
S-46A*	2000/1000/ 500/250	16/8/4	20	3⅛x2⅝x3⅜	4

†Williamson type circuit. Proper taps on primary for
operation. *70 v. line autoformers.

REPLACEMENT OUTPUT TRANSFORMERS

Tube to Standard Voice Coil (3-4 Ohms)

Triad No.	Primary		DC Ma	Audio Watts
	Tubes Used	Impedance		
S-12X	25L6, 50L6, 35A5, 50B5, etc.	2500	50	2
S-1X	25L6, 50L6, 35A5, 50B5, 2A3, 6B4, etc.	2500	60	3
S-2X	2A3, 6A3, 6B4, 6Y6, 7A5, 25B6, 50L6.	2000	55	4
S-3X	6V6, 7C5, 6AQ5, 25A6, 71, etc.	5000	40	3
S-16X	25L6, 50L6, 35A5, 50B5, etc.	3000 (5% tap)	60	3
S-4X	2A3, 6B4, 6L6, 6U6, 12A5, 25L6, 50A5, 117N7.	3000	70	5
S-5Z	6V6, 7C5, 6AQ5, 25A6, 71, etc.	5000	50	5
S-5X	6V6, 7C5, 6AQ5, 25A6, 71, etc.	5000	50	5
S-6X	3B5, 6AQ5, 6AS5, 25A6, 25A7, 35L6, 43, 117L7.	5000	35	2
S-7X	6K6, 7B5, 6F6, 1Q5, 31, 33, 41, 42, etc.	7500	40	3
S-8X	1C5, 1H4, 1Q5, 1S4, 3Q5, 3S4, 14A5, 25AC5.	8000	30	2
S-9Z	6K6, 7B5, 6F6, 1Q5, 31, 33, 41, 42, etc.	7500	50	5
S-9X	6K6, 7B5, 6F6, 1Q5, 31, 33, 41, 42, etc.	7500	50	5
S-11X	1J6, 3Q4, 3V4, 6AK6, 6AG7, etc.	10000	30	2
S-11Z	1J6, 3Q4, 3V4, 6AK6, 6AG7, etc.	10000	30	2
S-17X	1J6, 3Q4, 3V4, 6AK6, 6AG7, etc.	10000	30	3
S-13X	1A5, 1N6, 1LA4.	25000	10	2
S-15X	P.p.—6V6, 7C5, 6K6, 6F6, etc.	10000 CT	40	7
S-19Z	P.p.—6V6, 7C5, 6K6, 6F6, etc.	10000 CT	50	10
S-21A	P.p.—6V6, 7C5, 45, 6L6, etc.	8000 CT	50	15

UNIVERSAL OUTPUT TRANSFORMERS

Any Tube to Any Voice Coil

Triad No.	Application	Pri. DC Ma	Audio Watts	Wt. Lbs.
S-51X	Single or p.p. plates (4,000 to 14,000 ohms) to VC	35	5	½
S-53X	Single or p.p. plates (4,000 to 14,000 ohms) to VC	40	8	½
S-55Z	Push-pull plates (4,000 to 14,000 ohms) to VC	40 ea. side	10	1
S-55X	Push-pull plates (4,000 to 14,000 ohms) to VC	40 ea. side	10	1
S-57Z	Push-pull plates (4,000 to 14,000 ohms) to VC	50 ea. side	15	1½

PLUG-IN INPUT TRANSFORMERS

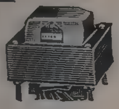
Highly magnetic shielded for coupling low-Z mikes or ma
heads to amplifier input. Nos. A-200P and 202P have 9
plugs for commercial amplifiers; HS-273P has 8-prong for re
ment of Ampex No. 17331-1.

Triad No.	Imped., Ohms		Freq. Resp.	Shielding	Size, In. H. x Dia.
	Pri.	Sec.			
A-200P	200/50 CT	36,000	30-20,000	70 db	2½ x 1¼
A-202P	200/50 CT	36,000	20-20,000	90 db	2¾ x 1¾
HS-273P	200/50 CT	80,000	30-30,000	70 db	1¾ x 1⅜
A-210P*	1:1 ratio, 0 dbm		20-20.000	45 db	2 3/16 x 1 1/16

*Stereo isolation transformer.

Audio Transformers

A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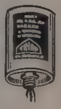
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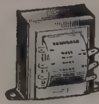
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LOW LEVEL AUDIO

mounting, permits rotation for minimum hum pickup. ing for a 40-60 db reduction in hum pickup (60-80 db nd A-12J, 70 db on A-13J), and flexible leads. Units e frequency range. Single-hole mounting on all units which has 2-stud mounting.

Application	Primary Ohms	Net Each
ice coil to grid	3.2	$ 5.28
ne or mike to grid	600/250/50	9.72
ne to grid	600/150*	9.84
ne or mike to grid	600/250/50	11.52
ne or mike to grid	600/150*	11.64
ne to transistor, line to line	600-200 CT, 50	11.52
rallel fed 6J5 or 6SN7 plate to push-pull grids	15,000	9.84
me as above, 8 ma DC in pri.	....	9.84
rallel fed 6J5 or 6SN7 to line	15,000	9.66
ne to line	600/250/50	9.81
me as A-55J	15,000	10.08
me as A-65J, 8 ma DC in pri.	15,000	9.75
ne to line	600/150*	10.32
sh-pull plate to line, 8 ma DC in primary	30,000 CT	9.90
dio choke, 15 hys.	....	10.32
dio choke, 200 hys., 5 ma DC; 100 hys., 10 ma DC	....	9.00
tput p-p transistors to line	2000 CT	9.66
ansistor interstage, 10 ma n primary	1000	9.75

ency response of all units is 30-15,000 cps except, ,000 cps; and A-79J, 40-15,000 cps. *Split windings.

TRANSFORMERS, LINE OR MIKE TO GRID

response 300-3,000 cps.

Application	Pri. Ohms	Turns Ratio	H x W x D Inches	Net Each
or single button e to grid	100	31.4	1³⁄₁₆ x2⅛ x1¼	$1.98
or DB mike to	400*	15.8	1³⁄₁₆ x2⅛ x1¼	2.16
to grid	500/ 200/ 67.5*	12	1³⁄₁₆ x2⅛ x1¼	2.28
gle-button mike grids—hi-gain	100	84	1¹¹⁄₁₆x2¹³⁄₁₆x1½	2.97
aker VC to grid	8/3.2	79	1³⁄₁₆ x2⅛ x1¼	2.22

ped.

CEIVER TRANSFORMERS, VOICE FREQUENCY

Application	Pri. Ohms	Sec. Ohms	H x W x D Inches	Net Each
mike or plate grid	100 10000	100000	1³⁄₁₆ x 2⅛ x 1¼	$2.31
be to line and -Z phones	10000	50, 2000	1⅜ x 2⅜ x 1⅜	2.61

RSTAGE TRANSFORMERS, PLATE TO GRID

re- ency esp.	Impedance, Ohms		Ratio	H x W x D Inches	Net Each
	Pri.	Sec.			
-3000	10000	90000 CT	1:3	1⅜ x2⅛ x1⅜	$2.25
7000	10000	90000 CT	1:3	1¹⁵⁄₁₆x3¼x1⅞	3.06
7000	15000 CT	135000 CT or 33750	1:1.5 1:3 1:6	2¼ x2⅞x2	3.45
10000	10000	90000 CT	1:3	2¾ x2⅜x2½	5.70
10000	20000 CT	45000 CT	1:1.5	2¾ x2⅜x2½	5.94

LOW LEVEL OUTPUT TRANSFORMERS

req. esp.	Impedance, Ohms		H x W x D Inches	Net Each
	Pri.	Sec.		
-3000	7000	50	1³⁄₁₆ x 2⅛ x 1¼	$1.92
-7000	18000 CT	600/250/50	1¹¹⁄₁₆x 2¹³⁄₁₆x 1½	2.76
-15000	7700 CT	8/4	1⅜ x 2⅜ x 1½	2.49
-3000	600/150*	600/150*	1³⁄₁₆ x 2⅛ x 1¼	2.85

ings.

C TO AC TRANSISTOR TRANSFORMERS

rimary DC	Output		Size, Inches H x W x D	Net Each
	Volts	Watts		
28	115	60	1⅞x2¼ x2	$ 8.70
12	115	115	3⅞x3⁹⁄₃₂ x3¼	11.64
12	115	60	3³⁄₃₂x2²¹⁄₃₂x2⅝	7.65

†60 cps.

DRIVER TRANSFORMERS

Triad No.	Driver Tubes	Output Tubes	Freq. Resp.	Pri. DC Ma	H x W x D Inches	Net Each
A-81X	30, 1H4, etc.	PP 19, 30's 1J6, etc.	300-3000	15	1³⁄₁₆x2⅛ x1¼	$2.13
A-83X	6F6, 42, 45, etc.	P P 6L6, 6F6, 6V6, 807, etc.	70-7000	40	1¹¹⁄₁₆x2¹³⁄₁₆x1½	2.58
A-85X	6F6, 42, 45, etc.	P P 6L6, 6F6, 6V6, 807, etc.	50-10000	40	1¹⁵⁄₁₆x3¼ x1⅞	3.00
A-89A	P-p plates to Cl.B or AB grids—Universal 15 watt	Any class B or AB tubes 100-500 watts output	50-10000	100 (per side)	3³⁄₁₆ x2⅝ x2⅝	6.81
A-91A	P-p plates to Cl.B or AB grids—Universal 30 watt	Any class B or AB tubes. 400-1500 watts output	50-10000	160 (per side)	3⁹⁄₁₆ x3 x3½	9.30
TY-61X	Transistor use		70-10000	100	1⅝ x2¹³⁄₁₆x1⅜	2.91

LINE OUTPUT TRANSFORMERS

Tube to Voice Coil and Line

Triad No.	Primary		Sec. Ohms	Audio Watts	H x W x D Inches	Net Each
	Tubes	Ohms				
S-27A	2A3, 6A3, 6B4, 6L6, 6U6, 6Y6, 12A5, 25B6, 35B5, 50A5	2500	4-8-16-500	8	2¾x2⅜x2½	$6.00
S-28X	2A5, 6AC5, 6B5, 6F6, 6K6, 7B5, 14A5, 25AC5	7500	4-8-16-500	5	1¹⁵⁄₁₆x3¼x1⅞	3.54
S-29X	6AQ5, 6AS5, 6V6, 7C5, 25A6, 25B5, 25L6, 25N6, 35A5, 35L6	5000	4-8-16-500	5	1¹⁵⁄₁₆x3¼x1⅞	3.36
S-22A	P-p, 2A3, 6B4, 6A5, 6L6, etc.	5000 CT	4-8-16-500	15	2¾x2¾x2½	6.81
S-24A	P-p, 6V6, 7C5, 6K6, 6F6, etc.	8000 CT	4-8-16-500	15	2¾x2¾x2½	6.81
S-60A	P-p, 6L6, 5881, 807, etc.	6600 CT	4-8-16-250-500	30	3½x3 x3¼	8.49

Line to Voice Coil

Triad No.	Impedance, Ohms		Audio Watts	H x W x D Inches	Net Each
	Primary	Secondary			
S-23X*	50	3.2	3	1³⁄₁₆ x2⅛ x1¼	$1.92
S-26X*	500/50	3.2	3	1³⁄₁₆ x2⅛ x1¼	2.01
S-65X	500	8/4	5	1⅜ x2⅜ x1½	2.37
S-66X*	500	16/8/4	3	1⅜ x2⅜ x1⅜	2.04
S-76Z	250/125/62.5/31	16/8/4	10	2¹¹⁄₁₆x3⅛ x2¼	5.04
S-77U	500 CT/125	32/16/8/4/2	30	3⁷⁄₁₆ x2¹³⁄₁₆x3½	8.82

70.7 Volt Line to Voice Coil

S-70Z*	16K/8K/4K/2K/1K	8/4	5	1¹¹⁄₁₆x2 x1⅜	$ 3.09
S-71Z*	4K/2K/1K/500	16/8/4	10	1¹⁵⁄₁₆x2⅜ x1½	3.33
S-25Z*	4K/2K/1K/500	8/4	10	2¼ x2⅞ x1⅞	3.99
SR45Z*	4K/2K/1K/500	16/8/4	10	2⅝ x3⁵⁄₁₆ x2¼	9.15
SR74K†	4K/2K/1K/500	16/8/4	10	3⅛ x3 x2½	9.33
S-72Z*	2K/1K/500/250	16/8/4	20	2¼ x2⅞ x1⅞	4.20
S-46A*	2K/1K/500/250	16/8/4	20	3⅛ x2⅝ x3⅜	9.15
S-75K†	2K/1K/500/250	16/8/4	20	4¼ x3⅝ x4⁷⁄₁₆	13.20
S-78Z‡	4K/2K/1K/500	16/8/4	10	1¹⁵⁄₁₆x2⅜ x1½	3.66
S-79Z‡	2K/1K/500/250	16/8/4	20	2¼ x2⅞ x1⅞	4.14
S-47Z	10K/5K/2.5K/1250/624	16/8/4	8	1⅝ x2¹³⁄₁₆x1⅝	3.75

*Autoformer. †Weatherproof autoformer. ‡Isolation.

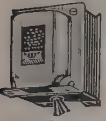
25-VOLT LINE TRANSFORMERS

S-125X	325 CT	4/8/16	2	1⅝ x2¹³⁄₁₆x1½	$2.97
S-126X	78 CT	4/8/16	8	1³¹⁄₃₂x3⁵⁄₁₆ x1¾	3.45
S-127X	35 CT	4/8/16	18	3¹⁄₁₆ x3⅝ x2⅜	4.65

MATCHING TRANSFORMERS—25 OR 70.7 VOLT LINE

Triad No.	Primary Matching Impedance, Ohms	Audio Watts	Size, Inches H x W x D	Net Each
S-128Z	62.5 CT-500 CT (25-70 v.) 500 CT-62.5 CT (70-25 v.)	40	2¹⁹⁄₃₂x4 x2½	$5.70
S-129Z	20.8 CT-166 CT (25-70 v.) 166 CT-20.8 CT (70-25 v.)	30	2¹⁹⁄₃₂x4 x2½	5.28
S-130Z	62.5 CT-500 CT (25-70 v.) 500 CT-62.5 CT (70-25 v.)	10	1¹⁵⁄₁₆x3⁵⁄₁₆x1⅞	3.60

Standard Series Transforme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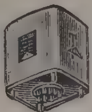
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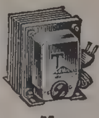
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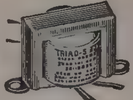
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MODULATION TRANSFORMERS, TUBE TO RF LOAD

All have frequency response of 300-3000 cps except TY-65Z, which has 70-15000 cps.

Triad No.	Primary Imped.†	Secondary Imped.†	Secondary Ma	Audio Watts	H x W x D Inches	Net Each
TY-65Z	32 CT (575 ma) Xsistor use	3K/4K/6K	100	10	2 5/16 x2⅞x2	$ 3.66
M-4Z	5000 Autoformer	6750/4	100 Total	10	1 15/16x2⅜x1½	3.00
M-5Z	5000 Autoformer	6750/4	165 Total	20	2 11/16x3⅛x2⅛	3.99
M-1X	10000 CT for 19, 1J6, 6N7, 6A6, etc.	5000/8000/10000	50	5	1 3/16 x2⅛x1¼	2.82
M-3X	10000 CT for 6N7, 6A6, 6F6, etc.	3000/5000/8000	100	20	2¼x3 13/16x2⅛	4.59
TY-66A	6 CT (5 a.) Xsistor use	3K/4K/6K	200	40	3⅞ x3 9/16x3⅛	9.09
M-7AL*	4250 CT for 807's	3000/5000/8000	200	60	4 5/16 x3⅝x4	12.96
M-15A	Multimatch	4000 to 20000	150	30	3½ x3 x3¼	11.28
M-16AL	Multimatch	4000 to 20000	180	60	3⅞ x3¼x3½	12.54
M-8AL*	Multimatch	4000 to 20000	200	80	4 5/16 x3⅝x4½	16.20
M-12AL*	Multimatch	4000 to 20000	300	125	4¾ x3⅞x4¾	19.32

*Plate leads outside of case. †Ohms.

PLATE POWER TRANSFORMERS

Primary 115 Volts—60 Cycles

Triad No.	Secondary Volts AC	Secondary Volts DC	Sec. DC Ma CCS	Sec. DC Ma ICAS	Rect. Fil.	Wt. Lbs.	Net Each
P-1A	440/220 CT	180/90	160	190	5V-3A	4	$ 8.16
P-3A	600/300 CT	250/125	300	360	5V-4A	5¾	9.90
P-5A	1100 CT	400	250	310	5V-4A	9	13.32
P-7A	1235 CT	500	250	310	5V-4A	11	13.80
P-9A	1235 CT	500	500	600	5V-6A	19	24.12
P-11A	1455 CT	600	250	310	......	12	15.36
P-14A‡	1780 CT	750/600	250	310	......	14	19.50
P-15AL†	2340 CT	1000	250	310	......	17	22.50
P-16AL†	2430 CT	1000	500	600	......	31	44.70
P-17AL†	2880 CT	1250	250	310	......	20	28.02
P-18AL†	2880 CT	1250	500	600	......	35	51.00
P-20AL†	3300 CT	1500	350	425	......	35	49.68

†Plate leads outside of case for 866 rectifiers.
‡Tapped Primary to produce the lower DC voltage.

FILAMENT TRANSFORMERS, SINGLE SECONDARY

Primary 115 Volts—60 Cycles

Triad No.	Secondary Volts	Secondary Amps	Test Volts	Case Size, In. H. x W. x D.	Wt. Lbs.	Net Each
F-1X	2.5 CT	3	1500	1 11/16x 2 13/16x 1⅝	¾	$2.34
F-72Z	2.5 CT	5	7500	2 11/16x 3⅛ x 2¼	1¾	4.05
F-6X	2.5 CT	6	2500	1 15/16x 3¼ x 2	1¼	3.18
F-3X	2.5 CT	10	3000	2¼ x 3 13/16x 2¼	1¾	3.84
F-5U	2.5 CT	10	7500	3 x 2½ x 2⅜	2	5.64
F-71U	2.5 CT	10	10000	3 x 2½ x 2¾	2½	6.24
F-7X	5 CT	3	1500	1 15/16x 3¼ x 2	1¼	3.48
F-8X	5 CT	6	1500	2¼ x 3 13/16x 2¼	1¾	4.02
F-9A	5.2 CT	13	1500	3 9/16 x 3 x 3½	4	8.07
F-9U	5.2 CT	13	1500	3⅜ x 2 13/16x 3⅜	3¾	7.17
F-10U	5 CT	14	10000	3¾ x 3⅛ x 3⅛	4¾	9.00
F-11U	5.2 CT	24	1500	3¾ x 3⅛ x 4	6½	9.00
F-13X	6.3	.6	1500	1⅜ x 2⅜ x 1⅜	½	2.10
F-14X	6.3 CT	1.2	1500	1 11/16x 2 13/16x 1⅝	¾	2.22
F-52X†	6.3	1.2	5000	1 15/16x 3¼ x 1⅞	1	3.00
F-51X†	6.3/5	2	5000	1 15/16x 3¼ x 2	1¼	3.42
F-53X†	6.3	4	5000	2⅝ x 4 1/16 x 2½	2¼	4.20
F-43X†	6.3	4	1500	1 5/16 x 3 5/16 x 2	1¼	3.75
F-16X	6.3 CT	3	1500	1 15/16x 3¼ x 2	1¼	3.33
F-18X	6.3 CT	6	1500	2⅝ x 4 1/16 x 2½	2¼	4.68
F-18A	6.3 CT	6	1500	3 3/16 x 2⅝ x 2⅝	2½	6.00
F-21A	6.3 CT	10	1500	3 9/16 x 3 x 3¼	3½	6.96
F-22A	6.3 CT	20	2000	4 x 3¼ x 4 5/16	7	10.20
F-23U	10 CT	7	1500	3⅜ x 2 13/16x 3⅜	4	7.05
F-25X	12.6 CT	1.5	1500	1 15/16x 3¼ x 2	1¼	3.57
F-44X	12.6 CT	2	1500	1 15/16x 3¼ x 2	1¼	3.54
F-26X	12.6 CT	2.5	1500	2 9/32 x 3 11/16x 2⅜	2¼	4.17
F-40X	24 CT	1	1500	1 15/16x 3¼ x 2	1¼	3.39
F-41X	25.2 CT	2.2	1500	2⅝ x 4 1/16 x 2½	2¼	5.04
F-50X†‡	6.3/5	2	5000	1 15/16x 3¼ x 2	1¼	3.15
F-45X	24 CT	1	1500	1 15/16 x 3¼ x 2	1¼	3.39

†Low capacity—high voltage insulation for damper tube operation. ‡Filament line transformer; primary 6.3 V./5V.

FILAMENT TRANSFORMERS, MULTIPLE SECONDA

Primary 115 Volts—60 Cycles

Triad No.	Secondary Volts	Secondary Amps	Test Volts RMS	Case Size, In. H. x W. x D.	Wt. Lbs.
F-27U	10 CT 2.5 CT	10 10	1500 7500	4⅛ x 3 7/16 x 3½	6
F-30A	5 CT 6.3 CT	3 8	1500	3 9/16 x 3 x 3⅝	3¾
F-32A	6.3 CT 6.3 CT	3 3	1500	3 5/16 x 2⅝ x 2⅝	2½
F-34A	6.3 CT 6.3 6.3 6.3	1.75 1.75 1.75 1.75	1500	3 5/16 x 2⅝ x 3	3
F-36A	6.3 CT 6.3 6.3 6.3	3.5 3.5 3.5 3.5	1500	4 x 3¼ x 3 9/16	5
F-38A	6.3 CT 6.3 5 6.3 5 CT	5 1 4 5 2	1500	4 x 3¼ x 3 15/16	5½
F-42A	12.6 CT 12.6	2.5 2.5	1500	3 9/16 x 3 x 3	3¼
F-83A*	12.6 CT 12.6 CT	5 5	1500	3⅞ x 3 9/32 x 3½	5¼

*Primary tapped for 105/115/125 volts.

"100" SERIES COMBINED PLATE AND FILAME

Primary 115 Volts—60 Cycles

"Climatite" treated coils and cores for protection against m and for elimination of lamination chatter. Small in size, ye at a minimum. Temperature rise design is 55° C. Copper fo shields grounded to case and core.

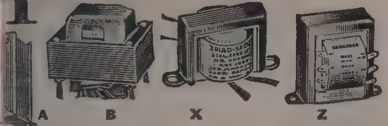
Triad No.	Plate Supply AC Volts	Plate Supply DC Ma	Rect. Fil. V.	Rect. Fil. A.	Other Filament Volts	Other Filament A.	Wt., Lbs.	
R-104A	500 CT	40	...	...	6.3 CT	2	1.55	$
R-105A	600 CT	65	...	...	6.3 CT	2.7	2	
R-106A	480 CT	50	5	2	6.3 CT	2	2.05	
R-107A	600 CT	50	5	2	6.3 CT	2	2.35	
R-108A	500 CT	75	5	2	6.3 CT	2.5	2.4	
R-109A	600 CT	75	5	2	6.3 CT	3	2.9	
R-110A	525 CT	90	5	2	6.3 CT	5	3.25	
R-111A	700 CT	90	5	3	6.3 CT	3.5	3.55	
R-112A	550 CT	110	5	2	6.3 CT	5	3.7	
R-113A	640 CT	40	5	3	6.3 CT	2	2	
R-113B	640 CT	40	5	3	6.3 CT	2	2	
R-114A	700 CT	125	5	3	6.3 CT	4.5	4.7	
R-115A	680 CT	70	5	2	6.3 CT	2.5	3	
R-116A	700 CT	160	5	3	6.3 CT	5	5.65	
R-118A	750 CT	175	5	3	6.3 CT	8	7.45	
R-120A	700 CT	200	5	3	6.3 CT	8	8.25	
R-121A	800 CT	200	5	3	6.3 CT	6	8.25	

COMBINED PLATE AND FILAMENT TRANSFORME

Primary 115 Volts 60 Cycles

Triad No.	Plate Supply AC Volts	Plate Supply DC Ma	Rect. Fil. V.	Rect. Fil. A.	Other Filament Volts	Other Filament A.	Wt. Lbs.	
R-22A	380/ 320 CT	70	6.3	.6	6.3 CT	3	2¾	$
R-22B	380/ 320 CT	70	6.3	.6	6.3 CT	3	2¾	
R-4A	500 CT	40			6.3 CT	2	1¾	
R-4B	500 CT	40			6.3 CT	2	1¾	
R-5A	600 CT	65			6.3 CT	2.7	2¾	
R-5B	600 CT	65			6.3 CT	2.7	2¾	
R-6A	480 CT	50	5	2	6.3 CT	2	2¾	
R-6B	480 CT	50	5	2	6.3 CT	2	2¾	
R-7A	600 CT	50	5	2	6.3 CT	2	2¾	
R-7B	600 CT	50	5	2	6.3 CT	2	2¾	
R-8A	500 CT	75	5	2	6.3 CT	2.5	3	
R-8B	500 CT	75	5	2	6.3 CT	2.5	3	
R-9A	600 CT	75	5	2	6.3 CT	3	3½	
R-9B	600 CT	75	5	2	6.3 CT	3	3½	
R-10A	525 CT	90	5	2	6.3 CT	5	4½	
R-10B	525 CT	90	5	2	6.3 CT	5	4½	
R-11A	700 CT	90	5	3	6.3 CT	3.5	4¼	
R-11B	700 CT	90	5	3	6.3 CT	3.5	4¼	
R-12A	550 CT	110	5	2	6.3 CT	5	4½	
R-12B	550 CT	110	5	2	6.3 CT	5	4½	
R-14A	700 CT	125	5	3	6.3 CT	4.5	6	
R-14B	700 CT	125	5	3	6.3 CT	4.5	6	
R-16A	700 CT	160	5	3	6.3 CT	5	7	
R-16B	700 CT	160	5	3	6.3 CT	5	7	
R-17A	750 CT 80 Tap	160	5	3	6.3 CT 2.5 CT	5 5	7¼	
R-18A	750 CT	175	5	3	6.3 CT	8	8½	
R-18B	750 CT	175	5	3	6.3 CT	8	8½	
R-19A	750 CT 80 Tap	200	5	3	6.3 CT 2.5 CT	6 10	9½	
R-20A	700 CT	200	5	3	6.3 CT	8	9¼	
R-20B	700 CT	200	5	3	6.3 CT	8	9¼	
R-72A	800 CT	140	5	3	6.3	4	5¾	
R-21A	800 CT	200	5	3	6.3 CT	6	9¼	
R-21B	800 CT	200	5	3	6.3 CT	6	9¼	
R-24A	800 CT	300	5	6	6.3 CT	6	14	
R-24B	800 CT	300	5	6	6.3 CT	6	14	
R-25A	800 CT	500	5	6	6.3 CT	3	19	
R-58A	875 CT	185	5	3	6.3 6.3 6.3	7 4 3	9½	
R-71A	900 CT	250	5 CT	4	6.3 CT 6.3	2 4	12	

Special Transformers



STRUMENT POWER SUPPLY TRANSFORMERS ARY 115 VOLTS,* FOR PREAMPS, VTVM, ETC.

ate Supply		Filament Windings Volts and Amps	H. x W. x D. Inches	Wt., Lbs.	Net Each
AC Volts	DC Ma				
0 CT	30	5 v.-2 a., 6.3-1.2 a., 6.3-1.2 a.	3⅛ x2⅝ x3⅛	3	$8.82
0 CT	22	6.3 v.-.8 a. 15.5/12.6 v.-.6 a.	2 x2⅝ x2 3/16	1¾	6.00
5	15	6.3 v.-.9 a.	1⅜ x1⅞ x1 9/16	1	3.99
0 CT	20	6 3 CT-2 a.	2¾ x2⅜ x2½	1¾	5.58
0 CT	40	6.3 v.-1.5 a.	2¾ x2⅜ x2⅜	1¾	5.34
5	50	6.3 v.-1.5 a.	2 5/16 x3¾ x2¼	1½	4.35
5	15	6.3 v.-.6 a.	1 11/16x2 13/16x1⅝	1	3.57
0	20	0/15/22.5/30-.6 a.	2¾ x2⅜ x2¾	2	6.39
5	200	6.3 CT-5.5 a.	2 x3⅜ x2 13/16	2¾	7.74

FOR CATHODE RAY TUBES

Plate Supply		Filament Windings Volts and Amps	Case Size, Inches H. x W. x D.	Net Each
AC Volts	DC Ma			
0-0-440-1250	125/5	6.3 v.-.6 a.*, 2.5 v.-1.75 a.†, 2.5 v.-1.75 a.†, 5 v.-3 a.	3¼x4⅛ x3½	$16.62
0-0-400-800	30/5	6.3 v.-.6 a.*, 6.3 v.-1 a., 6.3 CT-3 a., 5 v.-2 a., 5 v.-2 a.†	2⅝x3¾ x3⅛	13.32
00	3	6.3/5/2 5 v.-1 a.* 6.3/5/2.5 v.-3 a.†	2⅜x3 x2½	9.87
0 CT	70	6.3 CT-3 5	3⅞x3 9/32 x4⅝	12.00
650	3	6.3-.6§. 1.25-.3		
....	.....	6.3-.6 a.#	2⅞x2 9/32 x2¾	5.79
325	3	1.25 v.-.2 a.	3⅞x3 9/32 x4⅝	18.90
7	200	6.3 CT-5.65 a.		
0	475			

y shielded and insulated for full plate voltage. †Insulated ate voltage. ‡2-ohm resistor (2 w.) in series with filament is used. §Insulated for 3000 v. rms test. #Insulated for ms test.

FOR REGULATED POWER SUPPLIES

Plate Supply		Filament Windings Volts and Amps	Case Size, Inches H. x W. x D.	Net Each
AC Volts	DC Ma			
30†	75	6.3 v.-.6 a., 6.3 v.-.9 a., 6.3 v.-.3 a., 6.3 v.-.3 a.	3⅞x3¼ x3⅛	$11.34
30-720†	200	6.3†-8 a., 6.3 v.-3 a., 6.3 v.-1 a., 5 v.-3 a.	4⅝x3 15/16x4¾	17.70
250†	300	6.3†-8 a., 6.3 v.-3 a., 6.3 v.-3 a., 5 v.-6 a.	5 5/16x4½ x5⅝	24.72
250†	350	5 v.-4 a., 6.3 v.-4 a.,	5 5/16x4½ x5⅝	26.70
30*	50	6.3 v.-1 a., 6.3 v.-1 a.		
500†	400	5 v.-6 a., 6.3 v.-3 a., 6.3 v.-8 a.	5 5/16x4½ x7⅛	32.52

using sel. rect.; supplies 550 v. DC using 2-5R4GY rect. oke input, filament windings regulate screen voltages. apped.

OLATION TRANSFORMERS—50/60 CYCLES

V.A. Output	Input Volts	Output Volts	Case Size, In. H. x W. x D.	Net Each
35	115	115	2¼ x 3 13/16x 2¼	$ 4.59
50	230/115	115	2¼ x 3 13/16x 2¼	5.58
85	115	115	3 9/16 x 3 x 3⅝	9.84
150	115	115	4 x 3¼ x 4 3/16	11.67
150	230/115	115	3⅞ x 3¼ x 4¼	11.49
250	115	115	4¾ x 3⅞ x 5	19.14
250	230/115	115	4¾ x 3⅞ x 4¾	17.01
500	115	115	5 5/16 x 4½ x 6⅜	35.10
1000	115	115	5 5/16 x 4½ x 8⅜	51.90
150	95-130	115	4⅝ x 3 15/16x 3 15/16	23.34
350	95-130	115	4⅝ x 3⅞ x 6⅞	30.00
50	230/115	115	3 3/32 x 2 21/32x 2½	7.50
150	230/115	115	3⅞ x 3 9/32 x 3⅜	9.99
300	230/115	115	4⅝ x 3 15/16x 4½	14.07

rd, switch and meter for primary voltage control.

"SPLATTER" CHOKES

Inductance, Henries	Cur., Ma	Res., Ohms	H x W x D Inches	Net Each
.2 to 1.5*	100	95	1 15/16 x 3¼ x 2	$4.17
.05 to 1*	300	40	2 19/32 x 4 x 2⅝	6.00

st letter(s) of Triad No. indicates case style.

STEPDOWN AUTOFORMERS—50/60 CYCLES

Triad No.	VA Output	Input Volts	Output Volts	H. x W. x D. Inches	Net Each
N-1X	50	230	115	2¼ x 3 13/16x 2⅛	$ 3.87
N-3M	85	230	115	3 9/16 x 3 x 2⅞	7.86
N-4M	150	230	115	3 9/16 x 3 x 3⅝	9.66
N-5M	250	230	115	4 x 3¼ x 4 5/16	11.49
N-7M	600	230	115	4¾ x 3⅞ x 5	16.26
N-9M	1250	230	115	5 5/16 x 4½ x 6⅜	35.01
N-11M	2000	230	115	5 5/16 x 4½ x 8⅜	51.90
N-34X	150	95/105/115/125/135	115	2⅝ x 4 x 2½	5.82
N-35M*	350	95 to 130	115	4 5/16 x 3⅝ x 3½	13.20
N-50M†	500	95 to 130	115	4⅝ x 3⅞ x 5⅞	22.50

*M case with switch for primary voltage control; detachable cord. †With switch and meter for primary voltage control; detachable cord.

AUTOMOBILE RADIO REPLACEMENTS

Triad No.	Secondary				Size, Inches H. x W. x D.	Net Each
	DC Volts	AC Volts CT	Rec. Buffer	Max. DC Ma		
V-21	140, 170	365/430	.005	62	1⅝ x2¼x1⅞	$4.20
V-21B	140, 170	365/430	.005	62	1⅞ x2¼x1⅞	4.80
V-21K†	140, 170	365/430	.005	62	2 13/16x2 1/16x2 5/16	6.33
V-21Z	140, 170	365/430	.005	62	2 5/16 x2⅞x2	4.29
V-23	215, 250	530/605	.003	79	1½ x2⅝x2 3/16	4.92
V-23B	215, 250	530/605	.003	79	1⅝ x2⅝x2 3/16	6.00
V-23K†	215, 250	530/605	.003	79	2 13/16x2⅜x2¾	7.26
V-23Z	215, 250	530/605	.003	79	2 11/16x3⅛x2⅛	4.98
V-31*	240	575	.003	79	1½ x2⅝x2 3/16	4.47
V-31K*†	240	575	.003	79	2 13/16x2⅜x2¾	6.96

*Primary 12-16 volts; all others 6-8 volts. †7-hole universal mounting.

FILTERS

Hermetically sealed units include the commonly used low pass, high pass, band pass and band suppression types plus special telemetering and control circuit types. Filters listed are representative; for prices on filters to meet particular requirements, specify source and load impedances, permissible attenuation and ripple in the pass band, and required attenuation outside the pass band. **Teletype:** Available in pairs or singly. Type TF-101 peaks at 2125 cps and type TF-102 peaks at 2975 cps. Z-in is 50K ohms; Z-out is 250K ohms. Case GP-3. **Adjustable Low Pass:** Designed chiefly for laboratory work with a choice of attenuation characteristics; alterable to suit individual requirements. Case GP-4 and GP-3. **Adjustable Band Pass:** Have a pass band of 3%; three frequencies with a maximum spread of 20%. A second terminal header is provided on top of the case for connecting any of the three frequencies. Case GP-4 and GP-3.

SMOOTHING FILTER REACTORS

Triad No.	Inductance Henries*	Current Ma	Resistance Ohms	Inches H x W x D	Net Each
C-30X	50	15	3500	1⅜ x 2⅜ x 1½	$ 2.01
C-2X	2	15	70	1 9/16 x 2⅛ x 1¼	1.44
C-1X	15	20	1000	1 9/16 x 2⅛ x 1¼	1.50
C-3X	10	50	500	1 11/16x 2 13/16x 1½	2.01
C-4X	4	50	360	1⅜ x 2⅜ x 1⅜	1.74
C-6X	5	65	330	1 11/16x 2 13/16x 1½	1.98
C-5X	12	75	3 0	1 15/16x 3¼ x 1⅞	2.25
C-8X	7	75	240	1 15/16x 3¼ x 1⅞	2.34
C-7X	10	90	270	1 15/16x 3¼ x 2	2.58
C-9X	4	90	100	1 15/16x 3¼ x 1⅞	2.34
C-11X	6	110	160	2¼ x 3 13/16x 2⅛	3.06
C-10X	9	125	250	2¼ x 3 13/16x 2⅛	3.06
C-12X	6	160	165	2¼ x 3 13/16x 2¼	3.39
C-12A	6	160	165	2¾ x 2⅜ x 2⅝	4.59
C-13X	3	160	75	2¼ x 3 13/16x 2¼	3.24
C-14X	6	200	150	2⅝ x 4 1/16 x 2½	3.75
C-14A	6	200	150	3 3/16 x 2⅝ x 2⅝	5.19
C-16A	10	200	150	3 9/16 x 3 x 3⅝	6.66
C-21X	1.5	225	65	1 15/16x 3¼ x 1⅞	2.67
C-15X	4	250	100	2[illegible] x 4 1/16 x 2½	3.75
C-15A	4	250	100	3 3/16 x 2⅝ x 2⅝	5.19
C-23X	1.2	260	45	1 15/16x 3¼ x 2	2.67
C-24X	1	200	50	1 11/16x 2 13/16x 1½	2.13
C-27X	.7	290	25	1 11/16x 2 13/16x 1½	2.04
C-17X	1.5	30	40	2¼ x 3 13/16x 2⅛	3.09
C-18A	8	300	90	4 x 3¼ x 3 15/16	9.24
C-19A	10	300	105	4 5/16 x 3⅝ x 4¼	10.41
C-25A	2.6	310	60	3 3/16 x 2⅝ x 3⅛	6.00
C-42AL	8	350	105	4¾ x 3⅞ x 4	12.24
C-34X	.5	350	35	1 11/16x 2 13/16x 1½	2.25
C-28X	.7	350	35	1 15/16x 3¼ x2	2.73
C-29X	1.5	375	50	2¼ x 3 13/16x 2⅛	3.00
C-20A	6	400	60	4¾ x 3⅞ x 4½	12.06
C-22A	10	500	65	5 5/16 x 4½ x 5⅜	20.40
C-45AL	10	500	65	5 5/16 x 4½ x 5⅜	21.00
C-40X	.32	600	10	1 15/16x 3¼ x 2	2.52
C-47U	.3/.075	1A/2A	3/0.75	3 7/16 x 2 13/16x 3¼	8.13
C-48U	.08/.02	2.5A/5A	.57/.143	3¾ x 3⅛ x 4	9.48
C-49U	.032/.008	5A/10A	.19/.05	4 5/16 x 3 7/16 x 4½	11.13
C-80U	.024/.006	20A/40A	.096/0.24	4⅜ x 5¼ x 5¾	39.00

NOTE: Test Volts all models 1500 v. rms except C-16A and C-18A, 2500; C-19A, C-20A, C-22A, 3000; C-42AL, C-45AL, 5000 v. rms, *Minimum inductance, –20%.

SWINGING FILTER REACTORS

C-31A	25/5	20/200	150	3 9/16 x 3 x 3⅝	$ 6.72
C-32AL	20/4	35/350	105	4¾ x 3⅞ x 4	12.30
C-33A	25/5	30/300	105	4 5/16 x 3⅝ x 4¼	10.35
C-35A	20/4	40/400	60	4⅞ x 3⅞ x 4½	12.84
C-38AL	25/5	50/500	65	5⅜ x 4½ x 5¼	21.00
C-39A	25/5	50/500	65	5⅜ x 4½ x 5¼	20.70

NOTE: Test Volts C-31A, 2500 v. rms; C-33A, C-35A, C-39A, 3000 v. rms; C-32AL and C-38AL, 5000 v. rms.

MIL-T-27A Sealed Transforme

HERMETICALLY SEALED IN MIL STANDARD CASES

HS & HSM

All Series HS and HSM units are designed to meet MIL-T-27A specifications, and are cased in MIL-T-27A standard cases. Exceptions are those in GP cases, which may be classified as MIL-T-27A "YY" cases. All are "Climatite" treated, finished in gray enamel, and permanently marked with electrical and test data as specified in MIL-T-27A.

AUDIO INPUT TRANSFORMERS

Triad No.	Impedance, Ohms Primary	Impedance, Ohms Secondary	Freq. Resp.	Case* Key	Net Each
HS-1	600*/250*/150/ 62.5	77000	20–20000	GP-4‡	**$28.56**
HS-11	600*/250*/150/ 62.5	77000	20–20000	GP-2§	**21.66**
HS-3	600*/250*/150/ 62.5	117600 CT	20–20000	GP-5‡	**31.08**
HS-4	600*/250*/150/ 62.5	117600 CT	20–20000	GP-4#	**28.38**
HS-14	600*/250*/150/ 62.5	117600 CT	20–20000	GP-3§	**22.50**
HS-15†	600*/250*/150/ 62.5 (10 ma)	38400 CT	30–20000	GP-5#	**26.64**
HS-5	30-50	130000	50–10000	GP-4‡	**27.54**
HS-8	600*/250*/150/ 62.5	117600 CT	20–20000	GP-4§	**28.56**

AUDIO INTERSTAGE TRANSFORMERS

Triad No.	Primary	Secondary	Freq. Resp.	Case* Key	Net Each
HS-23	15000	110000	20–20000	GP-4#	**$21.72**
HS-25	15000	110000 CT	20–20000	GP-4§	**21.72**
HS-35	15000	111000 CT	20–20000	GP-2§	**19.50**
HS-27	20000/5000	60000 CT	20–20000	GP-4§	**19.68**
HS-29	20000/5000	80000 CT	20–20000	GP-4‡	**[illegible]7.48**
HSM-31	20000/5000	20000/ 5000 CT	20–20000	FA	**21.06**
HS-32†	15000 (6 ma)	6000 CT	20–15000	GP-5§	**27.48**

LOW LEVEL OUTPUT, MIXING, MATCHING, BRIDGING

Triad No.	Primary	Secondary	Freq. Resp.	Case* Key	Net Each
HS-50	15000	600*/250*/ 150/62.5	20–20000	GP-4#	**$23.22**
HS-60	15000	600*/250*/ 150/62.5	20–20000	GP-2§	**19.50**
HS-61†	15000 (5 ma)	600*/250*/ 150/62.5	50–15000	GP-5§	**20.64**
HS-52	20000/5000	600*/250*/ 150/62.5	20–20000	GP-4§	**24.00**
HS-54	20000/5000	600*/250*/ 150/62.5	20–20000	GP-4‡	**28.56**
HS-56	600*/250*/150/ 62.5	600*/250*/ 150/62.5	10–30000	GP-4#	**25.80**
HS-66	Same as above		10–30000	GP-3§	**23.16**
HS-58	Same as above		20–30000	GP-5#	**30.30**

*Balanced center tap. †Designed for DC in primary; all other types will show low frequency loss with unbalanced DC in winding. §45 db shielding. #70 db shielding. ‡95 db shielding.

COMBINED PLATE AND FILAMENT TRANSFORMERS

Primary 115 V.—50-60 Cycle

All types listed below are electrostatically shielded.

Triad No.	Plate Supply AC Volts	Plate Supply DC Ma	Filaments	Case* Key	Net Each
HSM-201*	500 CT	20	6.3 CT-2 a.	GA	**$21.66**
HSM-203	600 CT	50	6.3 CT-2.5 a. 5 -2 a.	JB	**21.42**
HSM-205	700 CT	70	6.3 CT-3 a. 5 -3 a.	JA	**24.15**
HSM-207	700 CT	120	6.3 CT-5 a. 5 -3 a.	KA	**26.40**
HSM-241	700 CT 70 v. bias tap	150	6.3 CT-6 a. 6.3 v.-2 a. 5 v.-3 a.	LA	**32.70**
HSM-212	1000/800 CT	150† 117‡	6.3/5-4 a. 6.3 CT-4 a. 6.3 v.-4 a.	LA	**32.40**
HSM-245	800/700 CT 70 v. bais tap	200	6.3 CT-6 a. 6.3 v.-4 a. 5 -6 a.	MA	**37.65**
HSM-216	1000/800 CT	200† 157‡	6.3/5-4 a. 6.3 CT-5 a. 6.3-5 a.	MA	**37.95**
HS-247	800/700 CT 70 v. bias tap.	300	6.3 CT-8 a. 6.3 v.-4 a. 5 -6 a.	GP-15	**45.84**
HSM-218	1000/800 CT	300† 235‡	6.3/5-6 a. 6.3 CT-6 a. 6.3-6 a.	GP-15	**52.35**
HSM-219	(115/230 pri.) 760/1600 CT	40/† 230		GP-15	**49.95**

*Low flux density—for preamplifier service. †Ch. input. ‡Cond. input.

ISOLATION TRANSFORMERS

Primary 115 V.—50-60 Cycle

Triad No.	VA Output	Secondary Amps	Output Volts	Case* Key	Net Each
HSM-270	50	.4	105/115/125	JB	**$17.64**
HSM-271	125	1	105/115/125	KA	**24.00**
HSM-272	250	2	105/115/125	NB	**33.30**

COMBINED PLATE AND FILAMENT TRANSFORME

Primary 115 V.—400 Cycle, Operate 380-1500 Cycl

All types electrostatically shielded.

Triad No.	Plate Supply AC Volts	Plate Supply DC Ma	Filaments	Case* Key
HS-402	475 CT	20	6.3 CT-1.5 a.	AJ
HS-401	500 CT	40	6.3 CT-1 a. 6.3-1 a.	EB
HS-405	600 CT	70	6.3 CT-2 a. 6.3-2 a. 6.3/5-2 a.*	GA
HS-407	600 CT	120	6.3 CT-3.5 a. 6.3-3.5 a. 6.3/5-3 a.*	JB
HS-409	700 CT	150	6.3 CT-4 a. 6.3/5-3 a.	HA
HS-413	450 CT	200	6.3 CT-6 a. 6.3 -6 a. 6.3/5 -4 a.*	JA
HS-415	800-600 CT	200	6.3 CT-6 a. 6.3-6 a. 6.3/5-6 a.*	KB
HS-417	800/600 CT	300	6.3 CT-6 a. 6.3-6 a. 6.3/5-6 a.*	LA

*Tapped for 5-volt rectifier use.

ISOLATION TRANSFORMERS

Primary 115 V.—400 Cycle, Operate 380-1500 Cycl

All types are electrostatically shielded.

Triad No.	VA Output	Secondary Amps	Output Volts	Case* Key
HS-470	40	.35	115	EA
HS-472	160	1.4	115	GA
HS-474	300	2.6	115	JA

FILAMENT TRANSFORMERS, 50-60 CYCLE

Triad No.	Primary Volts	Secondary Volts	Secondary Amperes	Insulation Test Voltage	Case* Key
HSM-223	115	6.3	0.6	1500	AJ
HSM-225	105-115-125	6.3 CT	2	1500	EA
HSM-226	105-115-125	6.3 CT	3.6	1500	FA
HSM-234	105-115-125	6.3 CT 6.3	10 10	2500	KA
HSM-227	105-115-125	6.3 CT† 6.3	3 3	2500	GA
HSM-229	105-115-125	6.3 CT	8	2500	JB
HSM-230	105-115-125	24 CT	0.8	1500	FA
HSM-236	105-115-125	12.6 CT† 12.6	2 2	2500	JB
HSM-228	105-115-125	6.3 CT† 6.3	6 6	2500	JA
HSM-231	105-115-125	6.3 CT 5 CT	5 3	2500	JB
HSM-232	105-115-125	2.5 CT	10	7500	HA
HSM-235	105-115-125	2.5 CT 10 CT	10 10	7500 2500	MA

†Series or parallel connections.

FILAMENT TRANSFORMERS, 380-1500 CYCL

Triad No.	Primary Volts	Secondary Volts	Secondary Amperes	Insulation Test Voltage	Case* Key
HS-436	115	6.3 CT	1	1500	AH
HS-425	105-115-125	6.3 CT	2	1500	AJ
HS-427	105-115-125	6.3 CT	5	1500	EA
HS-438	105-115-125	24 CT	1.5	1500	EA
HS-433	105-115-125	6.3 CT* 6.3	5 5	2500	FA
HS-435	105-115-125	6.3 CT* 6.3 6.3/5†	3.5 3.5 3	2000	FA
HS-441	105-115-125	5 CT* 5 2.5 CT	10 10 10	2000 7500	HA
HS-443	105-115-125	12.6 CT* 12.6	.8 .8	1500	AJ
HS-442‡	57.5-99.7-115-120 Single phase	12.6 CT 12.6	2 2	1500	EA

‡Two HS-442's can be used, 115 volt 3 phase to 26 volt 2 Scott-connected. *Series or parallel connection. †5-volt filament type rectifiers.

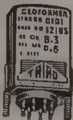
HERMETICALLY SEALED FILTER REACTORS

Triad No.	Current DC Ma	Inductance Henries	Resistance Ohms	Test Voltage	Case* Key
HSM-301	20	30	1000	1500	EB
HSM-302	20	14	550	1500	AJ
HS-331	40	4	375	1500	AH
HS-303	50	12	385	1500	EB
HS-333	70	3	225	1500	AJ
HSM-305	70	15	300	2500	GB
HS-335	120	3	150	1500	EB
HSM-307	120	15	185	2500	JB
HSM-309	150	9	115	2500	JB
HS-339	200	3	105	2000	FB
HSM-315	200	10	100	2500	JA
HS-341	300	2	48	2000	GB
HSM-319	300	10	85	2500	LA

*See case size table elsewhere.

Geoformers and Toroids

GEOFORMERS



Designed to meet the peculiar conditions developed in geophysical prospecting equipment; approach linear response 5-2000 cps with gradual attenuation above 2000 cps. Inductances held within ±5% of standard. Static shields on all input and interstage coils. “Climatite” improved vacuum impregnation. Input and interstage coils checked at 10 mv; outputs and reactors at 100 mv. All GP-1 and AF-1 cases are miniature and subminiature units. es are drawn from “Mumetal” and are hydrogen-annealed est low-density permeability. Individually tested for shielding.

INPUT GEOFORMERS

Impedance, Ohms		Pri. Hys.#	Case Key	Net Each
Primary	Secondary			
500†-333-233-200†-125*-67½†-50*-17*	157,000†-39,250*	8.7	GP-4T	$24.51
60†-44-30†-25-15*-7½*-5†-1.25*	157,000†-39,250*	.9	GP-4T	24.51
1000†-666-466-400†-250*-135†-100*-34*	137,000†-34,250*	55	GP-3P	21.18
500†-333-233-200†-125*-67½†-50*-17*	315,000†-78,750*	11.5	GP-3P	21.18
500†-333-233-200†-125*-67½†-50*-17*	315,000†-78,750*	11.5	GP-5W	28.05
500†-333-233-200†-125*-67½†-50*-17*	712,000†-178,000*	8	GP-3P	21.18
500†-333-233-200†-125*-67½†-50*-17*	712,000† 178,000*	8	GP-5W	28.05
500†-125*	50,000† CT	10	GP-2L	19.98
500†-333-233-200†-125*-67½†-50*-17*	450,000† CT	6.8	GP-2K	19.59
500† CT	200,000† CT	12	GP-5W	32.13
500†-125*	50,000† CT	10	GP-3R	20.67
200†-50*	442,000† CT	4	GP-3R	21.75
500†-333-233-200†-125*-67½†-50*-17*	145,000† CT	8.3	GP-1D	19.59
500†-125*	145,000† CT	8.3	GP-1F	19.59
500†-125*	392,000† CT	8.3	GP-1F	19.98
500†-125*	145,000† CT	3	AF-1	19.29
500†-125*	60,000† CT	7	AF-1	19.29
500†-125*	36,000† CT	10.5	AF-1	19.29
500†-125*	114,000† CT	5.2	AF-1	19.29
500†-125*	157,000† CT	8	GP-1F	19.59

OUTPUT GEOFORMERS

Impedance, Ohms		Pri. Hys.§	Case Key	Net Each
Primary	Secondary			
15,000†-3750*	500†-125*	915	GP-2K	$19.59
15,000†-3750*	500†-125*-Hi Level	65	GP-2K	19.59
20,000†-5000*	16†-12-8†-6½-4*-2*-1½†-.35*	1750	GP-3P	20.79
16,000†-4000*	500†-333-233-200†-125*-67½†-50*-17*	1600	GP-3P	20.79
16,000†-4000*	500†-333-233-200†-125*-67½†-50*-17* Hi Level	94	GP-3P	20.79
20,000†-5000*	60†-45-30†-24-15*-7½*-5†-1.3*	1750	GP-3P	20.79
600†-150*	600†-150*	15 @ 1 volt	GP-4T	25.83
18,000 CT	500†-333-233-200†-125*-67½†-50*-17*	280	GP-1D	16.80
500-125	500-125	3	GP-1D	16.38
500-125	16-4	3	GP-1D	16.38
15000† CT	16†-12.8†-6½-4*-2*-1½†-.35*	1000	GP-1D	19.59
15,000† CT	60†-45-30†-24-15*-7½-5†-1.3*	1000	GP-1D	19.59
15,000† CT	16†-12-8†-6½-4*-2*-1½†-.35*	1000	GP-1F	19.59
15,000† CT	60†-45-30†-24-15*-7½-5†-1.3*	1000	GP-1F	19.59
15,000† CT	16†-4*	400	AF-1	18.90
20,000†-5000*	50†-25-12.5-3	1450	GP-1F	19.59

AVC OUTPUT GEOFORMERS

16,000†-4000*	256,000†-64,000*-150†-37½*	500	GP-3P	$21.18
10,000†-2500*	10,000† CT-10,000†	150	GP-1F	20.49
15,000†	240,000† CT-140†-35*	200	GP-1F	20.40
15,000† CT	240,000† CT-35*	200	GP-1F	20.49
20,000† CT	240,000† CT-24†CT	230	GP-1F	20.49
15,000† CT	240,000† CT-35*	230	GP-1F	20.29

d, two windings. *Balanced, parallel windings. #At 10 mv. mv.

CHOPPER INPUT TRANSFORMERS

h quality as input transformers plus two halves of primary ced in inductance and “Q”. Cores treated to stop noise in of input. Adjust at 60 cps; high Z and untuned windings ency of 30-500 cps.

Impedance, Ohms		Turns Ratio‡	Max. Pri. Volts	Case Key	Net Each
Primary	Secondary				
1,000 CT-2,500	640,000 CT	1:8	25	GP-4T	$28.89
200,000 CT	12,500 CT	4:1	84	GP-2L	23.64
50,000 CT	800,000 CT	1:4	90	GP-5W	31.20
40,000 CT	1,000 CT	6.32:1	75	GP-2L	23.64
40,000 CT	40,000 CT	1:1	1.95	GP-5W	37.80
40,000 CT-10,000 CT	10,000 CT	2:1	70	GP-2L	23.64

nary to full secondary.

INTERSTAGE GEOFORMERS

Triad No.	Impedance, Ohms		Pri. Hys.#	Case Key	Net Each
	Primary	Secondary			
G-31	10,000†-2500*	100,000†-25,000*	350	GP-2K	$19.59
G-32	10,000†-2500*	100,000†-25,000*	350	GP-4T	24.51
G-33	10,000†-2500*	90,000†-22,500*	725	GP-3P	21.18
G-34	10,000†-2500*	90,000†-22,500*	725	GP-5W	27.87
G-40	10,000†-2500*	483,000†-120,700*	230	GP-3P	21.18
G-36	10,000†-2500*	22,500†-5625*	135	GP-1D	16.80
G-48	1000†-250*	250†-62½*	18	GP-1D	16.38
G-135	10,000†-2500*	75,000†-18,750*	300	GP-1D	19.59
G-235	10,000†-2500*	75,000†-18,750*	300	GP-1F	19.59
G-335	10,000†-2500*	75,000† CT	80	AF-1	18.90
G-336	10,000†-2500*	22,500† CT	160	AF-1	18.90
G-435	10,000†-2500*	90,000† CT	285	GP-1F	19.59
G-437	10,000†-2500*	22,500* CT	375	GP-1F	19.59

GEOFORMER REACTORS

Triad No.	Inductance, Henries @ 100 Mv.	“Q” @ 60 cps	DC Ohms	Case Key	Net Each
G-80	1050†-800†-550†-400†-280†	11	13,000	GP-2K	$24.57
G-84	1000†-250*	14	10,000	GP-3P	21.18
G-85	500†-125*	14	6,000	GP-3P	21.18
G-92	50† to 53	7	750	GP-2K	22.05
G-183	1050†-800†-550†-400†-280†-245†-153†-133†-80†-68†-45†	9	11,500	GP-1E	24.90
G-283	1050†-800†-550†-400†-280†-245†-153†-133†-80†-68†-45†	9	11,500	GP-1G	24.90
G-284	1000†-250*	9	13,000	GP-1G	19.98
G-285	500†-125*	9	10,500	GP-1G	19.98
G-493	1090-770-555-385-275	10	12,000	GP-1F	17.64
G-388	1000	9	12,000	AF-1	19.29
G-389	500	9	12,000	AF-1	19.29
G-391	300	9	5,400	AF-1	18.90
G-394	100	9	1,950	AF-1	18.90

†Balanced, two windings. *Balanced, parallel windings. #At 10 mv.

CASE SIZE

Type	H. x W. x D.	Type	H. x W. x D.
AF-1	1½" x ¾" x ¾"	GP-2L	2⅛" x 1¼" x 1 1/16"
GP-1D	1 11/16" x 1 7/32" x ⅞"	GP-3P	2⅜" x 1 15/32" x 1¼"
GP-1E	1 13/16" x 1 7/32" x ⅞"	GP-3R	2⅜" x 1½" x 1¼"
GP-1F	1 11/16" x 1 1/16" x ⅞"	GP-3S	2 1/32" x 1½" x 1¼"
GP-1G	1 13/16" x 1 1/16" x ⅞"	GP-4T	2½" x 1¾" x 1 7/16"
GP-2K	2¼" x 1 13/32" x 1 1/16"	GP-5W	2¾" x 2" x 1⅝"

TOROIDS

TYPES EA, EC AND EK

NOTE: Numbers indicate mh ratings. Tolerance, ± 1%.

No. EA-	DC Ma*	Net Each	No. EC-	DC Ma*	Net Each	No. EK-	DC Ma*	Net Each
001	270	$4.09	001	520	$4.42	010	262	$ 6.49
002	192	4.09	002	368	4.42	020	185	6.60
003	157	4.09	003	300	4.42	030	150	6.66
004	135	4.00	004	260	4.42	040	130	6.66
005	121	4.00	005	233	4.42	050	116	6.79
007	102	4.00	007	195	4.51	060	106	6.85
010	86	4.00	010	165	4.59	080	92	6.99
015	70	4.09	015	134	4.59	100	82	7.08
020	60	4.09	020	116	4.67	120	75	7.08
025	54	4.09	030	95	4.67	150	67	7.08
030	50	4.17	040	82	4.75	200	58	7.13
040	43	4.17	050	74	4.75	250	52	7.23
050	38	4.17	070	62	4.84	300	47	7.32
070	32	4.25	100	52	4.84	400	41	7.50
100	27	4.25	200	37	4.92	500	37	7.67
150	22	4.25	250	33	4.92	700	31	7.83
200	19	4.37	300	30	4.98	1000	26	7.99
250	17	4.42	400	26	5.00	2000	18.4	8.25
300	16	4.42	500	23	5.09	3000	15	8.49
400	14	4.51	600	21	5.09	4000	13	8.73
500	12	4.75	700	19.5	5.17	5000	11.6	8.82
600	11	4.84	1000	16.5	5.26	7000	9.8	9.24
700	10	5.00	1500	13.5	5.42	10000	8.2	9.66
1000	8.6	5.17	2000	11.6	5.50	20000	5.8	9.99
......	......	......	3000	9.5	5.58	30000	4.7	10.74
......	......	......	4000	8.2	5.67	40000	4.1	11.31
......	......	......	5000	7.4	5.84	......	......	......
......	......	......	7000	6.2	6.42	......	......	......
......	......	......	10000	5.2	7.14	......	......	......

TYPE EM

EM-	Ma*	Net	EM-	Ma*	Net	EM-	Ma*	Net
001	150	$4.34	020	34	$4.67	150	12.5	$4.92
002	108	4.34	025	30	4.67	200	11	5.00
003	87	4.34	030	27.6	4.71	250	9.6	5.00
004	76	4.34	040	24	4.75	300	8.8	5.17
005	68	4.34	050	22	4.75	400	7.6	5.26
007	57	4.42	060	19.5	4.84	500	7	5.42
010	48	4.50	070	18	4.84	700	5.8	5.75
015	39	4.62	100	15	4.92	1000	4.8	6.42

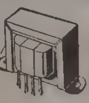
TYPE ET

ET-	Ma*	Net	ET-	Ma*	Net	ET-	Ma*	Net
001	680	$4.43	020	153	$4.67	150	56	$4.92
002	480	4.43	025	137	4.67	200	48	4.92
003	396	4.43	030	125	4.75	250	43	5.01
004	342	4.43	040	108	4.75	300	40	5.01
005	306	4.50	050	97	4.75	400	34	5.01
007	260	4.59	060	88	4.84	500	31	5.09
010	217	4.59	070	82	4.84	700	26	5.17
015	177	4.59	100	68	4.84	1000	22	5.26

*DC; for 5% inductance drop.

Available with molded cup or hermetically sealed. Write for prices.

High Level Audio Transformer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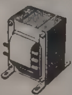
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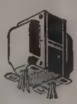
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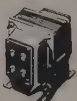
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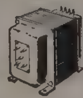
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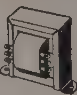
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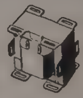
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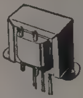
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VOICE COIL OUTPUT TRANSFORMERS

HIGH FIDELITY OUTPUT TRANSFORMERS

Max. power level, 50 watts. Frequency response excellent from 20 to 20,000 cps. Extremely low level of intermodulation distortion over entire range and at any power level. **Type "C"** upright shell mounting for all units. Shipping Weight, 6.5 lbs. Size: 4 5/16" h. x 3 9/16 w. x 4¼" d.

Stancor No.	Pri. Imp. (PP) Ohms	Sec. Imp. Ohms*	Max. Watts	Max. Pri. DC/Half	Net Each
A-8050	1500	8, 16	50	200	$13.63
A-8051	2500	8, 16	50	150	13.63
A-8052	3000	8, 16	50	175	13.63
A-8053	5000	8, 16	50	150	13.63
A-8056	6600	8, 16	50	125	13.63
A-8054	9000	8, 16	50	100	13.63
A-8060	1500	500	50	200	13.63
A-8061	2500	500	50	150	13.63
A-8062	3000	500	50	175	13.63
A-8063	5000	500	50	150	13.63
A-8066	6600	500	50	125	13.63
A-8064	9000	500	50	100	13.63
A-8072**	7600	4, 8, 16	25	100	16.60

*Where more than one secondary impedance is shown, only one value is to be used at any time.
**Primary provided with screen taps for ultra-linear use.

UNIVERSAL OUTPUT

Stancor No.	Application‡	Mtg. Type	Net Each
A-3856	Sgl or PP Pl (4K to 14K) to VC	Q	$2.90
A-3822*	Sgl Pl (7K to 10K) to VC	Q	1.95
A-3848†	Sgl Pl (7K to 16K) to VC	Q	2.60
A-3823	Sgl or PP Pl (4K to 14K) to VC	Q	3.37
A-3850	Sgl or PP Pl (4K to 14K) to VC	J	3.32
A-3825†	Sgl Pl (1500 to 4500) to VC	Q	2.63
A-3824†	Sgl or PP Pl (6K to 10K) to VC	Q	3.30
A-3849	Sgl Pl (1500 to 10K) to VC	Q	3.37
A-3880	PP Pl (4K to 14K) to VC	Q	4.39
A-2855	PP Pl (4K to 14K) to VC	L	3.76
A-3890	PP Pl (4K to 14K) to VC	TD	5.43
A-3852	PP Pl (4K to 14K) to VC	J	4.07
A-3870	PP Pl (4K to 14K) to VC	Q	4.15
A-3830	PP Pl (3K to 10K) to VC	J	4.50

‡Primary Impedance rated in ohms.
*Secondary Impedance: .7, 1, 1.4, 2, 2.8, 4 ohms.
†Secondary Impedance: 1, 2, 4 ohms.

SINGLE PLATE TO VOICE COIL

Stancor No.	Impedance in Ohms		Max. Watts	Mtg. Type	Net Each
	Primary	Secondary			
A-3330*	2,000	3.5	5	A	$ 1.98
A-3332	2,000	3.2	3	A	1.39
A-3876	2,000	4	5	A	1.48
A-3336†	2,500	3.5	5	A	1.99
A-3328	4,000	3.5	3	A	1.37
A-2203	4,000	8	5	A	2.47
A-3877	5,000	4	5	A	1.48
A-8092	5,000	3-4	8	A	2.10
A-3337	5,000	6-8	10	S	2.33
A-3310	5,000	500, 15, 8, 4	20	C	5.70
A-4431	6,000	3-4	5	A2	1.86
A-3878	7,000	4	5	A	1.52
A-2313	7,000	8	10	A	2.55
A-8114	7,600	3.2	5	A	1.77
A-3329	8,000	3.5	3	A	1.37
A-3879	10,000	4	5	A	1.48
A-3881	15,000	4	5	A	1.63
A-3327	25,000	4	5	A	1.84

*Hum reducing, with 4.5% primary tap. †Hum reducing, with 3% and 6% primary taps.

PUSH-PULL PLATES TO VOICE COIL

Stancor No.	Impedance in Ohms		Max. Watts	Mtg. Type	Net Each
	Primary, CT	Secondary			
A-3802	3,800/3,300	500, 250, 8, 4	75	C	$12.01
A-8094	4,000	8, 16, 32	7½	A	4.07
A-3851*	4,400	500, 250, 15, 8, 4	30	C	7.40
A-3872	5,000	15, 8, 4	18	TD	4.66
A-3800	5,000	500, 250, 15, 8, 4	30	C	6.87
A-3307	6,000	500, 15, 8, 4	30	C	7.92
A-3801	6,600	500, 250, 15, 8, 4	35	C	8.76
A-4430	9,000	3.2	5	A2	2.28
A-3885	9,000	500, 250, 15, 8, 4	35	C	8.68
A-4432	10,000	4	10	S2	2.46
A-3304	10,000/7,000	500, 15, 8, 4	25	C	6.43
A-3311	10,000	500, 15, 8, 4	25	C	6.91
A-3831	10,000	8, 4, 2	5	A	2.70
A-8093	10,000	3-4	10	A	2.17
A-3335	10,000	6-8/3.2-4	10	S	3.15
A-3839	10,000	2,000, 15, 8, 4	10	TD	4.83
A-2312	14,000	4	10	A	2.85
A-3496	14,000	4	5	A	2.70
A-3303	14,000	500, 15, 8, 4	20	C	6.53
A-3857	25,000	4	5	A	2.40

*Has tertiary winding to provide 10% inverse feedback.

LINE OUTPUT TRANSFORMERS (TUBE TO LIN

Stancor No.	Application	Impedance, Ohms	Mtg. Type
A-3841	Single Pl to line	Pri.—7K, 6K, 5K, 4K, 2.5K; Sec.—500	J
A-3842	P-P Plates to line	Pri.—14K, 12K, 10K, 8K CT; Sec.—500	J
A-4770	Single Pl to line	Pri.—7K, 6K, 5K, 4K, 2.5K; Sec.—500	J
A-3250	Single Pl or PP Plates to line	Pri.—20K, 10K, 5K; Pri.—20K CT; Sec.—500, 333, 200, 125, 50	Q
A-3315	Single Pl or PP Plates to line	Pri.—20K, 10K, 5K; Pri.—20K CT; Sec.—500, 333, 300, 125, 50	D

LINE TO VOICE COIL

Stancor No.	Output	Impedance, Ohms	Mtg. Type
A-8101	5 watts	Pri.—500; Sec.—6-8, 3.2	Q
A-3820	40 watts	Pri.—2K, 1500, 1K, 500 Sec.—15, 8, 4	D
A-3818	25 watts	Pri.—1500, 1K, 500 Sec.—15, 8, 4	J
A-3882	25 watts	Pri.—500, 333, 250 Sec.—15, 8, 4	D
A-3883	25 watts	Pri.—500; Sec.—15, 8, 6, 4	J
A-3837*	15 watts	Pri.—500, 1K, 1.5K, 2K, 2.5K, 3K; Sec.—.06-8 @ 500; .12-16 @ 1000 ohms	J
A-7947	8 watts	Pri.—2K, 1500, 1K, 500 Sec.—6-8/3.2	Q
A-7949	12 watts	Pri.—2K, 1500, 1K, 500 Sec.—6-8/3.2	J
A-8104	10 watts	Pri.—3K, 2K, 1.5K, 1K, 500; Sec.—16, 8, 4	J
A-3838‡	30 watts	Pri.—500; Sec.—250, 166, 125, 100, 84	BV

*Designed to operate one or more speakers in parallel a 500 ohm line. ‡Designed to operate one or more spea series across a 500 ohm line, or to match unequal lines.

70.7 VOLT LINE TO VOICE COIL

Stancor No.	Power Steps in Watts	Impedance, Ohms	Type Mtg.
A-8102	8/4/2/1/0.5	Pri.—625, 1,250, 2.5K, 5K, 10K; Sec.—4, 8, 16	J
A-8103	16/8/4/2/1/0.5	Pri.—312.5, 625, 1,250, 2.5K, 5K, 10K; Sec.—4, 8, 16	J
A-8105	5/2.5/1.25/0.62/0.31	Pri.—1K, 2K, 4K, 8K, 16K; Sec.—4, 8	Q

140 VOLT LINE TO VOICE COIL

A-8106	1/2/4/8	Pri.—2.5K, 5K, 10K, 20K, Sec.—4, 8, 16	J
A-8107	1/2/4/8/16	Pri.—1,250, 2.5K, 5K, 10K, 20K; Sec.—4, 8, 16	J
A-8108	0.625/1.25/2.5/5.0	Pri.—4K, 8K, 16K, 32K; Sec.—4, 8	Q

25 VOLT LINE TO VOICE COIL

A-8095	5/2.5/1.25/.62/.31	Pri.—125, 250, 500, 1K, 2K; Sec.—4, 8	Q
A-8096	8/4/2/1/0.5	Pri.—78, 156, 312.5/625/1250; Sec.—4, 8, 16	J
A-8097	16/8/4/2/1/0.5	Pri.—39, 78, 156, 312.5, 625, 1250; Sec.—4, 8, 16	J

MODULATION TRANSFORMERS

PLATE MODULATION

Stan. No.	Impedance in Ohms		Watts	Mtg. Type	Wt. Lbs.
	Primary	Secondary			
A-3812	10K CT	4000	5	A	0.7
A-3871	4500	8500	10	TD	1.4
A-3845	10K CT	8000/6500/5000/3000	25	C	2.8
A-3808	3800/3300 CT	10000/7500/5000/4000	60	D	7.7
A-3829	9K/6900 CT	6250/5000/4000/3300	175	D	11.4

"POLY-PEDANCE" MODULATION

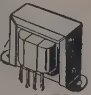
Multi-tapped units to match all common impedances of C ulator (2K-20K ohms) to Cl. C load imped. of 2K-20

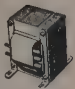
Stancor No.	Max. Watts	Max. Pri. DC	Max. Sec. DC	H. x W. x D. Inches	Mtg. Type
A-3891	15	100 ma	100 ma	3 3/16 x 2⅝ x 2⅞	D
A-3892	30	150 ma	150 ma	4 x 3¼ x 3⅝	D
A-3893	60	180 ma	180 ma	4 x 3¼ x 4⅛	D
A-3894	125	225 ma	225 ma	4¾ x 4 x 4⅝	D
A-3898	300	260 ma	260 ma	8⅛ x 5¾ x 7⅝	FS
A-3899	600	500 ma	500 ma	9⅛ x 7¼ x 10¼	FS

Shipping Wts.: A-3891, 2.5 lbs.; A-3892, 4.3; A-3893, 6.2 9.4; A-3898, 37.9; A-3899, 70 lbs.

207-598

Power, Special Transformers


A, PA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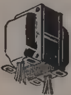
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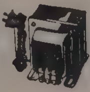
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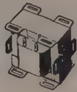
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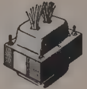
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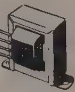
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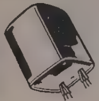
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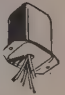

TD

PLATE AND FILAMENT SUPPLIES

ıry windings for 117 v., 60 cps operation. All plate sup- ·er-tapped. PC Series—Type PC Mtg.; PM Series—Type :.; Series PA—Type PA Mtg.; Series PS—Type PS. ıpproximately 260 v. DC to condenser input filter.

Plate AC V.	Plate DC Ma	Rec. Fil. V.	Rec. Fil. A.	Amp Fil. V.	Amp Fil. A.	Base Area, Inches	Wt., Lbs.	Net Each
470	40	5	2	6.3 CT	2.0	2⅝x2⅝	2.2	$ 5.53
470	40	5	2	6.3 CT	2.0	2½x3	2.2	5.77
480	55	5	2	6.3 CT	2.0	2⅝x2¾	2.4	5.49
480	55	5	2	6.3 CT	2.0	2½x3	2.4	5.64
500	70	5	2	6.3 CT	2.5	2⅝x3⅛	3.2	6.36
500	70	5	2	6.3 CT	2.5	2½x3	3.2	6.36
520	90	5	2	6.3 CT	3.0	3x3½	4.0	7.05
520	90	5	2	6.3 CT	3.0	2⅞x3⅜	4.0	7.05
540	120	5	3	6.3 CT	3.5	3¼x3½	4.9	9.19
540	120	5	3	6.3 CT	3.5	3⅛x3¾	4.9	9.19

choke input, VR supply, Spkr. field or Hi-V, with con- put filter.

650	40	5	2	6.3 CT	2.0	2⅝x2¾	2.4	$ 5.76
650	40	5	2	6.3 CT	2.0	2½x3	2.4	5.76
650	55	5	2	6.3 CT	2.0	2⅝x3⅛	3.2	6.00
650	55	5	2	6.3 CT	2.0	2½x3	3.2	6.00
650	150	5	3	6.3 CT	5.0	3¼x3⅞	5.8	9.59
650	150	5	3	6.3 CT	5.0	3⅛x3¾	5.8	9.61
680	70	5	2	6.3 CT	2.5	3x3⅜	3.8	7.50
680	70	5	2	6.3 CT	2.5	2⅞x3⅜	3.8	7.50
700	90	5	2	6.3 CT	3.0	3x3⅝	4.5	7.92
700	90	5	2	6.3 CT	3.0	2⅞x3⅜	4.5	7.92
720	120	5	3	6.3 CT	3.5	3¼x3¾	5.5	8.99
720	120	5	3	6.3 CT	3.5	3⅛x3¾	5.5	9.36
750	150	5	3	6.3 CT	4.5	3⅝x4	5.8	12.03
750	150	5	3	6.3 CT	4.5	3½x4⅛	5.8	12.55
800	200	5	3	6.3 CT	5.0	4x4	8.2	12.55
800	200	5	3	6.3 CT	5.0	3¾x4½	8.2	12.58
800	250	5	4	6.3 CT	5.0	4x4½	10.0	14.35
1200	200	5	3	6.3	3.0	4x4¼	8.3	14.76
				6.3	3.0			

with 6AX5, 6X4, 6X5, or selenium rectifiers.

125	15	‡	...	6.3	0.6	2⅜x1⅜	0.7	$ 2.37
250	25	.....	...	6.3	1.0	2⅞x1¾	1.0	2.85
125	50	‡	...	6.3	2.0	3¾x2⅛	1.5	3.84
440	50	6.3	.6	25.2	0.5	2⅝x2⅝	2.2	6.41
460	50	.....	...	6.3	2.5	2⅝x2⅝	2.2	4.80
460	50	.....	...	6.3	2.5	2½x3	2.2	4.80
480	70	.....	...	6.3	3.0	2⅝x2⅞	2.6	5.52
480	70	.....	...	6.3	3.0	2½x3	2.6	5.52
520	90	.....	...	6.3	4.0	3x3½	3.5	6.42
520	90	.....	...	6.3	4.0	2⅞x3¾	3.5	6.69

ɔr combination filament windings.

480	60	.....	...	6.3 CT	2.75	2 3/16x2 11/16	2.3	$ 5.58
500	10	.....	...	6.3	0.6	2⅞x2⅛	1.0	4.66
				6.3	1.2			
500	20	.....	...	6.3	0.6	3 5/16x2¼	1.5	4.83
				6.3	1.2			
600	70	5.0	3	6.3 CT	3.0	2⅞x3⅛	4.0	7.85
600	120	5	3	6.3 CT	5.0	3 3/16x3¾	5.75	9.59
650	40	5 CT	2	2.5 CT	4.0	2½x3	2.5	6.80
700	70	5	3	2.5 CT	9.0	3¼x3	3.8	8.46
				6.3 CT	3.0			
700	110	5	2	6.3 CT	3.0	3 3/16x3⅞	5.5	10.56
				6.3 CT	3.0			
800	110	5 CT	3	2.5 CT	15.0	3⅛x3¾	5.4	11.38
				2.5 CT	3.5			
750	180	5 CT	3	2.5 CT	6.0	3½x4⅛	6.2	12.11
				6.3 CT	3.3			
880	130	5	3	6.3 CT	3.5	3⅝x3⅛	7.0	11.29
# 800	175	5 CT	3	2.5	1.75	4x3⅞	8.3	14.53
80 v.				6.3 CT	2.5			
bias				6.3 CT	2.5			
# 675	200	5 CT	3	6.3 CT	5.0	3¾x4⅛	9.6	13.33
740	275	5 CT	3	6.3 CT	7.0	3¾x4½	9.3	13.96
§ 1740	150	5	2	6.3	3.5	3 9/16x4 7/16	5.9	12.64
820	60							

4 Mtg. †Type C Mtg. ††Type C1 mounting. *Type TD g. #117/107 primary. ‡½ wave. §Intermittent duty.

VIBRATOR TRANSFORMERS

Secondary VAC	Filter Input VDC*	DC Ma	Recom. Buffer Capac.	Mtg. Type	Net Each
210–0–210	150	40	.008 μf	S	$ 3.75
188–0–188	200	40	.003 μf	S	3.99
240–0–240	225	40	.008 μf	NV	5.27
290–0–290	250	50	.006 μf	NV	5.14
300–0–300	260	65	.006 μf	NV	5.45
320–0–320	285	75	.006 μf	NV	6.66
370–0–370	330	100	.007 μf	NV	7.35
350–0–350	.....	135	.01 μf	C	12.11
350–0–350	.....	100	.005 μf	C	11.69

C primary. †6 v. DC and 117 v. AC primaries; filament— 2.25 amps. *When used with sync. vibrator. DC and 117 v. AC primaries; filament 12.6 v. CT at

AUTO RADIO VIBRATOR TRANSFORMERS

Exact duplicate for 6 volt DC primary.

Stancor No.	Replaces	VDC @ Fltr. Inp.	DC Ma	Mtg. Type	Net Each
P-4064	Delco 7240519	280	65	TA	$8.36
P-4065	Delco 7255881	265	56	TC	8.11
P-6470	Regal 140-111	145	50	TD	5.40
P-6471	Motorola 25B472533	235	70	TA	5.40
P-6472	Col.-Det. D71014 Col.-Bendix C217020 Col.-Mot. C71014 Motorola 25B70950	270	56	TA	5.40
P-6473	Zenith 95-1073	272	73	TA	5.76
P-6474	Zenith 95-1066	240	52½	TA	5.40
P-6476	Col.-Det. D70267 Col.-Mot.-Det. C70267	220	53½	TA	5.76
P-6477	Motorola 25C500189	150	50	M2	3.10
P-6478	Motorola 25C501644	225	70	R	3.53
P-6479	Philco 65-0358	260	60	RA	4.75
P-6480	Philco 65-0347	225	70	RA	3.91
P-6481	Philco 32-8313-1	250	60	M4	4.50
P-6483	Farnsworth VE-169	240	50	TB	5.80
P-6484	Motorola 25B70950-E	265	70	TA	5.76
P-6485	Zenith 95-1071	240	70	TA	5.80
P-6486	Motorola 25C472586-C	240	80	TA	6.56
P-6487	Motorola 25B-23103	170	60	TA	5.52
P-6488	Motorola 25C521454	225	50	TB	4.47
P-6490	Bendix C291787-1	265	52	R	3.33
P-6499	Delco 1220163	250	60	TC	7.76

For 12 volt DC primary

P-6482	Delco 6064	250	60	TC	$8.51
P-6489	Delco 6067	250	60	R	4.15
P-6493	Motorola 25C535794	275	75	S1	4.13
P-6494	Philco 32-8592-1	245	70	RA	3.72
P-6495	Motorola 25K535795	275	75	S1*	4.28
P-6497	Delco 7265604	250	55	S2	3.66

*Identical to S1 but has half shell.

SELENIUM RECTIFIER TRANSFORMERS

For nominal input of 117 v. AC, 50-60 cps. Mtg. Type BV.

Stancor No.	Applied VAC under Load	Output, Max. DC Resistive/Induct. Load Volts	Output, Max. DC Resistive/Induct. Load Amps	Output, Max. DC Capacitative Load* Volts	Output, Max. DC Capacitative Load* Amps	Filter Cap., μf	Net Each
RT-201#	11.7-29.4	11.2	2.0	13.8	2.0	1 K	$ 5.07
RT-201†	11.1-28.5	23.0	1.25	30.0	1.25	.5K	5.07
RT-202#	12.0-29.8	11.1	4.0	14.7	4.0	2 K	6.89
RT-202†	12.0-29.8	24.3	2.0	33.0	2.0	1 K	6.89
RT-204#	11.7-29.2	12.0	8.0	14.5	8.0	4 K	8.91
RT-204†	11.6-29.2	24.0	4.0	32.4	4.0	2 K	8.91
RT-206#	12.0-29.7	11.5	12.0	14.4	12.0	6 K	12.11
RT-206†	12.0-29.7	24.0	6.0	32.0	6.0	3 K	12.11
RT-208#	12.1-29.2	11.4	15.0	14.8	15.0	7.5K	15.26
RT-208†	12.1-29.2	23.7	8.0	32.5	8.0	4 K	15.26
RT-2012#	12.1-29.0	11.4	22.5	14.3	22.5	12 K	22.50
RT-2012†	12.0-29.0	23.5	12.0	33.0	12.0	6 K	22.50
RT-408†	25.0-53.5	44.0	8.0	63.0	8.0	4 K	33.28
RT-4012†	25.0-53.0	43.5	12.0	60.0	12.0	6 K	43.82

#CT Rectifier Circuit. †Bridge Rectifier Circuit. *For complete details and instructions, write for Stancor Bulletin No. 518.

ISOLATION TRANSFORMERS

Built-in electrostatic shields grounded to core and frame.

STRAIGHT ISOLATION (125/115/105 V. TO 115 V.)

Stancor No.	Watts	Mtg. Type	H. x W. x D. Inches	Shpg. Wt. Lbs.	Net Each
P-6410*	50	K	3 9/16x2 15/16x3⅛	3.7	$ 7.85
P-6160	100	KA	4¾x4x3⅞	7	16.50
P-6161	250	KA	4¾x4x5⅜	14.2	30.00
P-6298	500	KA	7⅝x6⅛x7⅝	28	43.13
P-6125	1000	FK	7¾x5⅝x7¾	34.8	60.99
P-6123	1500	FK	7¾x5⅝x9	49.8	73.59

*Primary 115 v. only.

STEP-DOWN ISOLATION (250/230/210 V. TO 115 V.)

P-6383	100	KA	4¾x4x3¾	7.3	$14.63
P-6385	250	KA	4¾x4x5⅜	14.2	23.82
P-6387	500	KA	7¾x5⅝x7½	29.5	45.39
P-6389	1000	FK	7¾x5⅝x8	33.8	57.63
P-6390	1500	FK	7¾x5⅝x9⅜	50.3	75.14

ISOLATION TESTING (117 V. TO 105/115/125 V.)

P-6415	350	KC	5¾x4⅛x5¾	17	$23.52

BIAS SUPPLY TRANSFORMERS

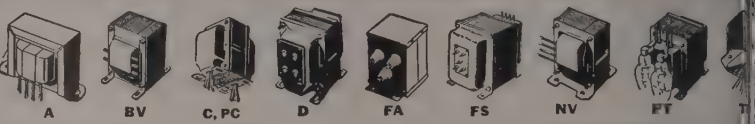
Rectifier Filament, 5 v., 3 amps. Type CD mounting.

Stancor No.	High Voltage Supply (CT) VAC at DC Milliamps.	H. x W. x D. Inches	Net Each
P-6317*	200/170/130/90 @ 200 ma.	4x3¼x3⅝	$11.46
P-6318†	450/400/350/250 @ 200 ma.	4 5/16x3⅝x4⅛	13.64

Shipping Weight: *4.9 lbs.; †7 lbs.

STANCOR

Power Transformers



TRANSCEIVER MODULATION AND OUTPUT TRANSFORMER

Stancor No.	Application	Impedance, Ohms†	Mtg. Type	Net Each
A-3817	Transceiver modulation and output* (autoformer)	Pri.—5000 Sec.—6750	A	**$3.00**

*Used in Citizens' Band transceiver. Write for Information. †At 50 ma DC.

FILAMENT TRANSFORMERS

SINGLE SECONDARY

Primary 50 or 60 cycle operation.

Stancor No.	Secondary Volts	Secondary Amps	H. x W. x D. Inches	Wt.‡ Lbs.	Mtg. Type	Net Each
P-4026*	2.5	1.5	1⅝x2⅞x1½	0.7	A	**$ 2.76**
P-4082†	2.5 CT	2.5	2 11/16x2¾x2¼	1.5	TD	**4.83**
P-6133*	2.5 CT	5.0	2 11/16x3 5/16x2¼	1.5	S	**3.80**
P-4083†	2.5 CT	6.0	3 3/16x2⅝x2⅛	2.2	C	**5.06**
P-3024†	2.5 CT	10.0	3 3/16x2⅝x2⅝	2.5	C	**5.00**
P-6454†	2.5 CT	10.0	3⅛x3⅝x2½	2.5	S	**4.00**
P-3060*	2.5 CT	10.0	3½x2⅞x2½	2.5	BV	**6.72**
P-3026†	5.0 CT	3.0	3 3/16x2⅝x2⅝	2.4	C	**5.00**
P-4088*	5.0 CT	3.0	3⅛x2½x2½	1.8	BV	**4.25**
P-6467*	5.0 CT	3.0	2x3 5/16x2	1.4	A	**3.20**
P-6455†	5.0 CT	6.0	2⅝x3 5/16x2¼	2.0	S	**4.33**
P-3062*	5.0 CT	6.0	3⅛x2½x2½	2.3	BV	**5.14**
P-5000†	5.0 CT	6.0	3 3/16x2½x3	3.1	C	**5.80**
P-6135*	5.0 CT	10.0	3⅛x2½x2⅞	3.0	BV	**5.60**
P-4086†	5.0 CT	14.0	5⅛x4⅝x8½	12.3	FA	**22.88**
P-6302†	5.0 CT	22.0	5⅛x4⅝x8½	13.5	FA	**32.12**
P-6492*	5.0 CT	30.0	4¾x3¾x3⅞	7.5	C	**10.94**
P-6468†	5.0 CT	30.0	4 5/16x3 9/16x3⅞	4.3	D	**12.79**
P-6305†	5.0 CT	30.0	5⅛x4⅝x10	18.3	FA	**30.96**
P-6137*	5.25 CT	13.0	3⅞x3⅛x3¼	5.2	BV	**8.19**
P-6134*	6.3 CT	1.2	1⅝x2¾x1¾	0.8	A	**2.10**
P-8190*	6.3	1.2	2x3¼x1¾	1.0	A	**2.76**
P-8191#	6.3	1.2	2x3¼x1¾	1.0	A	**2.97**
P-5014*	6.3 CT	3.0	3⅛x2½x2½	2.0	BV	**4.67**
P-6466*	6.3 CT	3.0	2x3 5/16x2	1.4	A	**3.39**
P-6462†	6.3	3.0	2⅝x4 x2⅝	2.0	S	**5.60**
P-4019†	6.3 CT	4.0	3 3/16x2⅝x2⅛	2.7	C	**5.04**
P-6465*	6.3 CT	0.6	1⅜x2⅜x1¾	0.4	A	**1.98**
P-3064*	6.3 CT	6.0	3⅛x2½x2⅞	2.4	BV	**5.42**
P-4089†	6.3 CT	6.0	3⅝x3 x3⅛	3.5	C	**6.62**
P-6456†	6.3 CT	6.0	2¼x3⅝x2½	2.0	A	**3.82**
P-6308†	6.3 CT	10.0	3½x2⅞x2¾	3.4	BV	**6.59**
P-6309†	6.3 CT	20.0	4⅝x3¾x3	6.7	BV	**10.21**
P-5015*	7.5 CT	4.0	3⅛x2½x2⅞	2.7	BV	**4.75**
P-4091†	7.5 CT	5.0	3⅝x3 x3	3.4	C	**6.70**
P-6138*	7.5 CT	8.0	3⅞x3⅛x2⅞	4.7	NV	**7.29**
P-6457†	7.5 CT	2.1	4½x3¾x4	8.0	C	**12.69**
P-5016*	10.0 CT	4.0	3½x2⅞x2⅝	3.3	BV	**6.05**
P-6458†	10.0 CT	5.0	3 1/16x2½x2⅞	3.0	BV	**4.70**
P-4096†	10.0 CT	5.0	4x3¼x3⅛	4.0	C	**7.22**
P-6139*	10.0 CT	8.0	3⅞x3⅛x3⅛	4.9	BV	**7.50**
P-4097†	10.0 CT	8.0	4x3¼x3⅝	5.2	C	**7.82**
P-6461*	10.0 CT	10.0	3⅞x3¼x3⅝	5.0	C	**8.79**
P-5002†	10.0 CT	12.0	5⅛x4⅝x8½	14.7	FA	**24.85**
P-3020†	11.0 CT	10.0	4¾x4 x3½	7.7	C	**9.96**
P-8130*	12 6 CT	2.0	2 1/16x3¼x2	1.4	A	**3.43**
P-6469*	25.2	1.0	2x3¼x2	1.4	A	**3.27**

MULTIPLE SECONDARY

P-6144*	2.5 CT 5.0 CT 6.3 CT	3.5 3 0 3.0	3⅝x3 x3⅛	3.7	C	**$ 7.80**
P-6338*	2.5 5.0 5.0 CT 6.3 CT	3.0 3.0 2.0 3 0	3½x2⅞x2¾	3.4	BV	**7.59**
P-5009†	5.0 CT 6.3 CT	3.0 6 0	4x3¼x3¼	4.5	C	**8.90**
P-5008†	5.0 CT 6.3 CT	4.0 3.6	3⅞x3 x3¼	3.8	C	**7.83**
P-4022†	5.0 CT 6.3 CT	6.0 6.0	4x3⅛x3½	4.8	C	**8.46**
P-6333*	5.0 5.0 6.3 CT 7.5/6.3 CT	3.0 3.0 4.0 3.0	2⅞x2⅞x3⅛	4.7	BH	**9.43**
P-6428*	6.3 6.3 6.3 6.3 CT	1.75 1.75 1.75 1.75	3⅛x2½x3	3.0	C	**6.21**
P-6429*	6.3 6 3 6.3 6.3 CT	3.5 3 5 3 5 3.5	3⅞x3⅛x3½	4.75	C	**8.43**
P-6430*	6.3 CT 6.3 CT	3.0 3 0	3⅛x2½x2⅞	2.75	C	**5.50**
P-6431*	6.3 CT 6.3 CT	6.0 6.0	3⅞x3⅛x3½	4 75	C	**8.34**

Primary Volts: *117 v.; †117/107 v.; #6.3 v. ‡Shipping.

PLATE TRANSFORMERS

All primary windings for 60 cps operation.

Stancor No.	Secondary VAC (at Plate)	DC Volts	Mtg. Type	N Ea
P-8040#	500/40-0-500	400, 40	C	**$ 1**
P-8041†	615/520/40-0-520/615	500, 400, 40	C	**1**
P-8042#	770/510/40-0-510/770	600, 400, 40	C	**2**
P-8043#	950/750/40-0-750/950	750, 600, 40	FS	**7**
P-8044‡	1200-0-1200 535-0-535	1000 400	FS	**4**
P-8025§	1230/940-0-940/1230	1000, 750	FS	**8**
P-8026#	1475/1175-0-1175/1475	1250, 1000	FS	**7**
P-8027x	1510/1210-0-1210/1510	1250, 1000	FS	**7**
P-8028#	1740/1460-0-1460/1740	1500, 1250	FS	**7**
P-8029*x	1775/1500-0-1500/1775	1500, 1250	FS	**9**
P-8030#	2100/1800-0-1800/2100	1750, 1500	FS	**7**
P-8031*x	2075/1775-0-1775/2075	1750, 1500	FS	**8**
P-8032#	2400/2100-0-2100/2400	2000, 1750	FS	**7**
P-8033*x	2375/2065-0-2065/2375	2000, 1750	FS	**10**
P-8034*#	2900/2385-0-2385/2900	2500, 2000	FS	**10**
P-8035*z	2950/2375-0-2375/2950	2500, 2000	FS	**12**

Pri. Volts: *115-230; all others 115. DCMa: #300 CCS ICAS; †250 CCS, 310 ICAS; §400 CCS, 500 ICAS; ‡150 CC ICAS dual-tap; **z** 500 CCS, 575 ICAS; **x** 500 CCS, 625 ICA

DC output rated at load terminals of single-section, reactor filter with full-wave mercury-vapor rectification. 117 volts

Stancor No.	Secondary AC Volts	DC Volts	DC Ma CCS	DC Ma ICAS	Mtg. Type	Wt., Lbs.	E
PT-8311	1200–0–1200	1000	225	280	PT	13.0	**$1**
PT-8312	1200–0–1200	1000	325	405	PT	22.2	**2**
PT-8313	1475–0–1475	1250	250	310	PT	22.3	**2**
PT-8314	1790–0–1790	1500	225	280	PT	24.0	**3**
PT-8315	2065–0–2065	1750	200	250	PT	24.5	**3**

DC output rated CCS at load terminals of single-section, re input filter, ICAS with single-section capacitor-input filte mary, 117 volts, AC. **Mounting PC.**

Stancor No.	Secondary AC Volts	DC Output Volts	DC Output Ma	Filter Input	Recti-fier	
PC-8301	415–0–415	300 425	200 160	Reactor Capacitor#	5U4G 5U4G	**$**
PC-8302	515–0–515	385 500	235 200	Reactor Capacitor#	5U4G 5R4GY	**1**
PC-8303	665–0–665	500 750	250 200	Reactor Capacitor#	5R4GY 5R4GY	**1**
PC-8304	750–0–750	600 850	265 200	Reactor Capacitor#	2-5R4GY 5R4GY	**1**
PC-8305	920–0–920	750 1000	250 200	Reactor Capacitor#	2-5R4GY 5R4GY	**1**
PC-8306*	920–0–920	750 1100	150 125	Reactor Capacitor#	5R4GY 5R4GY	**1**
	500–0–500	380 550	150 125	Reactor Capacitor#	5U4G 5U4G	

#Capacitor input rating is for intermittent duty. *Tapped with dual rectifier-filter systems to deliver two rated outp

AUTOTRANSFORMERS

115 v. secondary except No. P-6299 150/140/130/120 100/90. 230 v. primary except No. P-6299—115 v.

Stancor No.	Watts	H. x W. x D. Inches	Shpg. Wt. Lbs.	Mtg. Type	E
P-6287	40	3½x2 11/16x2 7/16	2.2	K2	**$**
P-5062	80	3⅝x3 x3¼	3.8	K	
P-5063	100	4x3¼x3¼	4.5	K	
P-5064	150	4 5/16x3⅝x3⅝	5.2	K	
P-5065	300	4¾x4 x4⅛	8.8	K	**1**
P-6141	500	4¾x4 x5⅛	13.7	K	**1**
P-6124	1000	7⅛x5⅝x6¾	24.5	FK	**3**
P-6299*	150	4x3¼x4¾	6.0	KA	**1**

*Tap switch permits variable voltages, 90-150 v. Primary equ with 6′ cord and plug. Secondary connected to female rece

LINE ADJUSTING TRANSFORMERS

Nominal output, 115 v. Input (50-60 cps); 65/75/90/100 130/145 v. In Type PV case with output meter.

PV-6441	150†	5½x3⅞x5⅜	6.4	PV	**$1**
PV-6442	350†	5½x3⅞x6⅛	10.5	PV	**2**
PV-6443	500†	5½x3⅞x6⅞	15.0	PV	**2**
PV-6444	750†	6 5/16x4½x8⅛	19.0	PV	**3**

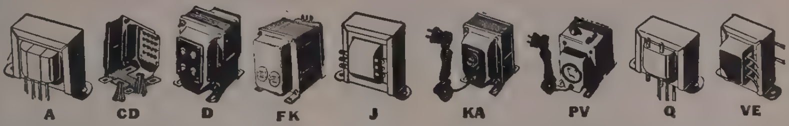
†VA or watts to pure resistive load.

STEPUP-STEPDOWN TRANSFORMERS

Use with air conditioners. 60 cps; 208/230 v.; 230/208 v.

Stancor No.	Output, KVA	For Motor Size	H. x W. x D. Inches	Shpg. Lbs.	Mtg. Type	N E
PSU-2000	2.3	.5-1 hp	3½x3¾x6½	9	PSU	**$1**
PSU-3000	3	1-2 hp	4 x4½x6	10	PSU	**2**

Chokes, Audio Transformers



SMOOTHING CHOKES

power supplies. Rated 10 v., 60 cps. with max. DC in
ı. Tolerance of −15% +50% on all ratings.

Hys.	Ma	Ohms	H. x W. x D. Inches	Mtg. Type	Wt., Lbs.	Net Each
20.0	15	900	1⅝x2⅞x1½	A	0.7	$2.14
12.0	30	400	1⅜x2⅜x1⅜	A	0.5	1.83
4.5	50	300	1⅜x2⅜x1⅜	A	0.4	1.28
7.0	50	550	1⅜x2⅜x1⅜	A	0.4	1.42
16.0	50	580	2x3¼x1¾	A	1.1	2.17
13.0	65	500	2x3¼x1¾	A	1.0	2.40
8.0	75	290	2 1/16x2 5/16x1¾	L	1.0	2.65
15.0	75	400	2¼x3¾x2¼	A	1.7	2.88
16.0	80	360	3 3/16x2⅝x2⅝	C	2.5	4.64
8.0	85	250	2x3¼x2	A	1.4	2.40
5.0	100	300	2 11/16x2¾x2 3/16	TD	1.5	3.45
10.5	110	225	2⅝x4x2¼	A	2.3	3.59
2.5	130	100	2x3¼x1¾	A	1.0	2.25
7.0	140	165	3 3/16x2⅝x2⅝	C	2.5	4.64
2.3	150	60	2x3¼x1¾	A	1.0	2.25
3.0	150	90	2¼x3¾x2¼	A	1.7	2.57
7.0	150	200	2⅝x4x2¼	A	2.2	3.60
7.0	150	170	3x2½x3	TD	2.3	4.90
4.0	175	100	3 3/16x2⅝x2⅝	C	2.4	4.54
1.5	200	85	1⅝x2⅞x1½	A	0.8	1.80
2.0	200	60	2¼x3¾x2¼	A	1.8	2.85
5.0	200	90	4x3¼x3⅜	C	4.5	6.80
4.5	200	80	3⅝x3x3⅛	C	3.5	5.67
8.5	200	120	3⅞x3⅛x3	NV	4.4	7.50
4.0	250	60	3½x2⅞x3 3/16	BV	4.2	6.20
4.0	250	60	3⅝x3x3½	C	4.3	6.96
1.0	300	43	2¼x3¾x2¼	A	1.7	2.90
2.8	300	60	2⅝x2¼x4	A	2.5	3.53
8.0	300	80	4⅝x3¾x3½	NV	7.3	11.04
8.0	300	80	4¾x4x4⅛	D	7.8	11.48
8.0	300	80	4¾x4x3⅞	C	7.8	11.04
0.8	375	25	2½x3¾x2	A	1.5	3.60
7.5	400	60	4¾x4x5⅛	D	11.8	15.69
6.0	500	75	7⅛x5⅝x5½	FS	23.7	48.17

SMOOTHING CHOKES FOR AC-DC SETS

Hys.	Ma	Ohms	H. x W. x D. Inches	Mtg. Type	Wt., Lbs.	Net Each
3.5	50	200	1⅝x2⅞x1½	A	0.7	$1.65
5.0	50	250	1⅝x2⅞x1½	A	0.7	1.65
7.0	50	300	1⅝x2⅞x1½	A	0.7	1.80
4.5	50	325	1⅜x2⅜x1⅜	A	0.4	1.42
7.0	50	350	1⅝x2⅞x1½	A	0.7	1.80
8.5	50	400	1⅝x2⅞x1½	A	0.7	1.65
8.0	50	450	1⅝x2⅞x1½	A	0.7	1.65
9.0	50	500	1⅝x2⅞x1½	A	0.7	1.60

SWINGING CHOKES

Hys.	Ma	Ohms	H. x W. x D. Inches	Mtg. Type	Wt., Lbs.	Net Each
13.5-3.5	15-150	130	3 3/16x2⅝x2½	C	2.3	$4.43
12-2	17.5-175	100	3 3/16x2⅝x2⅝	C	2.4	4.73
12-2	20-200	80	3⅝x3x3⅛	C	3.5	5.95
12-2	20-200	90	4x3¼x3⅜	C	4.5	6.59
12-2	25-250	60	3½x2⅞x3⅛	BV	4.3	6.77
12-2	25-250	60	3⅝x3x3½	C	4.3	6.96
20-4	30-300	80	4⅝x3¾x3½	NV	7.2	11.01
20-4	30-300	80	4¾x4x3⅞	C	7.9	11.44
20-4	30-300	80	4¾x4x4⅛	D	7.7	11.70
17-3	40-400	60	4¾x4x5⅛	D	11.7	15.23
16-4	50-500	75	7⅛x5⅝x5⅜	FS	24.3	40.78

HIGH CURRENT FILTER CHOKES

nce values rated at 1 v. rms, 60 cps.

Hys.	Amps	Ohms	H. x W. x D. Inches	Mtg. Type	Wt., Lbs.	Net Each
.035	2.0	.75	2⅜x2⅝x2¾	BH*	1.9	$3.55
.025	4.0	.425	3x3⅜x2⅞	BH*	3.4	6.05
.01	8.0	.15	3¼x3¾x3 3/16	BH*	5.3	7.97
.01	12.5	.11	3½x4⅛x3 1/16	BH*	5.9	9.17
.005	22.5	.03	3⅞x4½x4½	BH*	11.9	13.46

ounting type BH, with leads instead of lugs.

AUDIO FILTERS

SPLATTER SUPPRESSOR FILTER

Ind. Range Henries*	Max. DC Ma	Mtg. Type	H. x W. x D. Inches	Net Each
0.048—0.9	300	BH	2⅝x3x3	$5.56

rovided to obtain various amounts of inductance.

BAND PASS AND LOW PASS FILTERS

Application	Imped. Ohms Output	Imped. Ohms Input	Max. Oper. V. RMS	Mtg. Type	Net Each
Band Pass 200-3000 cps	500 or 100,000	10,000	10.0	TD	$26.66
Low Pass 3000 cps Cutoff	100,000	100,000	1.5	TD	12.96

AUDIO CHOKES

.t 2 v., 200 cps. with max. DC in windings.

Hys.	Ma	Ohms	H. x W. x L. Inches	Mtg. Type	Net Each
16	50	580	2x3¼x1¾	A	$2.17
135	5	6500	2 11/16x2¾x2 3/16	TD	4.28

INPUT TRANSFORMERS

MICROPHONE OR LINE TO LINE

Stancor No.	Impedance, Ohms	H. x W. x D. Inches	Mtg. Type	Net Each
A-4350*	Pri-500/333/200/125/50	2x3¼x1¾	Q	$4.33
A-4407*†	Sec-500/333/200/125/50	3 3/16x2⅝x3¼	D	8.99

*Has dual primary. When properly connected, the 500 and 200 ohm sections are center-tapped. †Static shield between Pri. and Sec.

MICROPHONE, PICKUP OR LINE TO GRID

Stancor No.	Impedance, Ohms	H. x W. x D. Inches	Mtg. Type	Net Each
A-4705	Pri-200/70 Sec-80,000	1⅜x2⅜x1⅜	A	$2.97
A-4706	Pri-100 Sec-60,000	1⅜x2⅜x1½	A	2.17
A-4708	Pri-200CT Sec-57,000	2x2⅜x1⅝	J	2.93
A-4351*	Pri-500/333/200/125/50 Sec-89,000	2 11/16x2¾x2 3/16	TD	4.63
A-4352*	Pri-500/333/200/125/50 Sec-89,000	2x3¼x1¾	Q	4.80
A-4709	Pri-30/15/8/4 Sec-106,000	2 11/16x2¾x2 3/16	TD	5.20
A-4742	Pri-100; Sec-400,000 CT	2 5/16x2⅞x1¾	S	3.13
A-4747	Pri-70; Sec-1,300,000	1 7/16x1 5/16x1¼	VE	3.15

*Has dual primary. When properly connected, the 500 and 200 ohm sections are center-tapped.

INTERSTAGE AND DRIVER TRANSFORMERS

PUSH-PULL INPUT

Single Plate (7,000 to 15,000 ohms) to p-p class "A" grid; rated 10 ma DC. A-53 Single Plate to Single Grid (7,000-20,000 ohms). A-4745 has static shield between pri. and sec. windings.

Stancor No.	Turns Ratio	H. x W. x D. Inches	Mtg. Type	Net Each
A-52-C	1:2	1⅜x2⅜x1⅜	A	$2.25
A-62-C	1:2	1⅝x2⅞x1½	A	2.33
A-53	1:3	1⅜x2⅜x1½	A	2.02
A-53-C	1:3	1⅜x2⅜x1⅜	A	2.40
A-63-C	1:3	1⅝x2⅞x1½	A	2.70
A-64-C	1:4	2x2⅜x1¾	S	2.43
A-73-C	1:3	2x3¼x1¾	A	3.15
A-4719	1:3	2 11/16x2¾x2 3/16	TD	4.96
A-4745	1:2	2 11/16x2¾x3 3/16	TD	5.66

MULTI-PURPOSE—SPLIT SECONDARIES

Can be used as single plate to single grid, single plate to p-p grid, or p-p plate to p-p grid interstage transformers. Rated 10 ma DC.

Stancor No.	Turns Ratio	H. x W. x D. Inches	Mtg. Type	Net Each
A-4774	1:3	2 5/16x2⅞x1¾	S	$3.25
A-4773	1:3	2 11/16x2¾x2 3/16	TD	5.20

PUSH-PULL PLATES TO PUSH-PULL GRIDS

For 7,000 to 15,000 ohm plate impedances. Rated 10 ma DC.

Stancor No.	Turns Ratio	H. x W. x D. Inches	Mtg. Type	Net Each
A-4711	1:1	1⅝x2⅞x1½	A	$3.15

PUSH-PULL PLATES TO PARALLEL OR PUSH-PULL GRIDS

For 7,000 to 20,000 ohm plate impedances. Rated 15 ma DC.

Stancor No.	Turns Ratio	H. x W. x D. Inches	Mtg. Type	Net Each
A-4208	1:1.4	3 3/16x2⅝x2⅝	C	$5.67

SINGLE DRIVERS—SINGLE PLATE TO PUSH-PULL GRIDS

Stancor No.	Pri. Imp. Ohms	Pri. ½ Sec. Ratio	Pri. Ma DC	Mtg. Type	Net Each
A-4713	10,000	2:1	30	A	$2.12
A-4752	10,000	2/1.5/1:1	40	A	2.93
A-4722	10,000	2:1	30	TD	4.33
A-4292	10,000	2.5:1	20	A	2.27
A-4723	10,000	3:1	30	A	2.15
A-4210	1500–5K	3:1	40	C	4.96
A-4702	1500–5K	5:1	80	C	4.90

PUSH-PULL DRIVERS—P.P. PLATES TO P.P. GRIDS

Stancor No.	Pri. Imp. Ohms	Pri. ½ Sec. Ratio	Pri. Ma DC	Mtg. Type	Net Each
A-4208*	20K–30K	2.8:1	15	C	$5.67
A-4701*	20K	3:1	25	C	6.40
A-4212	1500–5K	3.2:1	50	C	5.20
A-4703*	3K–10K	5:1	95	C	6.44

*These units have split secondaries for individual bias adjustment and/or use of inverse feedback.

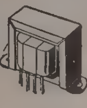
"POLY-PEDANCE" DRIVER TRANSFORMERS

Tapped to give usable ratios in Class "B" driver. Cap., 15 watts, except A- 4763, 30 watts. Type CD mtg.

Stancor No.	Ratio Pri. to ½ Sec.	H. x W. x D. Inches	Net Each
A-4761†	1.25:1, 1.4:1, 1.6:1, 1.8:1, 2:1, 2.2:1, 2.4:1	3 3/16x2⅝x3⅝	$11.10
A-4762♯	2.6:1, 3:1, 3.2:1, 3.4:1, 4:1, 4.5:1, 5:1	3 3/16x2⅝x3⅛	10.46
A-4763‡	1.25:1, 1.5:1, 1.75:1, 2:1, 2.25:1, 3.2:1	3⅝x3x4	12.96
A-4765*§	1:0.75, 1:0.85, 1:1, 1:1.25, 1:1.45, 1:1.75, 1:2, 1:2.25, 1:2.5, 1:2.75, 1:3.15	3 3/16x2⅝x3⅝	11.50

*Line Driver. Max. DC: †Pri., 150 ma; Sec., 100 ma. ♯Pri., 150 ma; Sec., 180 ma. ‡Pri., 225 ma; Sec., 280 ma. §Pri., 180 ma; Sec., 100 ma.

Stancor TV Transformers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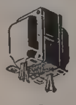
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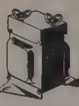
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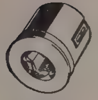
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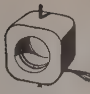
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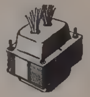
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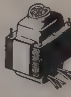
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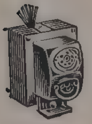
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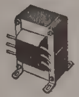
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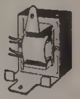
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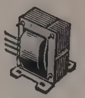
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DEFLECTION YOKES

Stancor No.	Induc., Mh. Hor.	Induc., Mh. Vert.	Res., Ohms Hor.	Res., Ohms Vert.	Max. Scan	Mtg. Type	Unit Lgth.	Net Each
DY-1A	8.3	50	13.5	66	53°	DY	3"	$ 7.69
DY-2A	10.3	50	14.5	66	70°	DY	2¾"	7.37
DY-8A	8.5	50	14.5	52.5	70°	DY	2¾"	7.37
DY-9A	13.5	50	17.5	53.5	70°	DY	2¾"	8.57
DY-10A	30.0	3.5	45	3.5	70°	DY	2¾"	7.37
DY-11A	20.0	50	31	50	70°	DY	2¾"	9.07
DY-12A	30.0	50	41	50	70°	DY	2¾"	8.17
DY-13A	12.5	48	15	52	90°	DY	3"	10.38
DY-14A	30.0	3.5	45	3.5	70°	DY	2¾"	7.74
DY-15A	25.0	40.0	35	50	70°	DY	2¾"	8.04
DY-16A	20.0	44.0	26	45	90°	DY	3⅛"	9.36
DY-17A	12.0	42.0	20	43	90°	DY	3"	8.83
DY-18A	14.5	41.5	18	50	70°	DY	3¼"	8.70
DY-19A	20.0	41.5	28	50	70°	DY	3¼"	8.64
DY-20A	20.0	41.5	28	50	70°	DY	3¼"	8.26
DY-21A	14.5	3.1	10	3.5	70°	DY	2⅞"	7.59
DY-22A	20.0	46.0	25	45.0	70°	DY	2⅞"	8.68
DY-23A	20.0	45.0	27	43	90°	DY	3⅛"	8.70
DY-24A	18.5	11.0	34	11.5	90°	DY	2¾"	7.74
DY-25A	24.0	11.0	46	11.0	90°	DY	2¾"	7.74
DY-26A	19.0	11.5	34	16.5	110°	DY	2¼"	10.86
DY-27A	17.5	12.3	35.5	13.5	110°	DY	2¼"	10.45
DY-28A	24	3.2	36	3.4	70°	DY	2⅞"	7.05
DY-29A	24	3.2	36	3.4	70°	DY	2⅞"	7.14
DY-30A	24	3.2	36	3.4	70°	DY	2⅞"	7.40
DY-31A	24	42	44.2	42	90°	DY	3¼"	8.93
DY-32A	24	42	34	42	90°	DY	3¼"	8.70
DY-33A	30.5	43	34	50	70°	DY	2½"	6.99
DY-34A	30	47	45	42	90°	DY	2¾"	7.50

FOCUS COILS

Stancor No.	DC Ohms	Max. DC Ma	Dimensions, In. H x W x D	Mtg. Type	Shpg. Wt.	Net Each
FC-10	247	200	3 11/32 x 3 11/32 x 1 29/64	FC	2.0	$6.24
FC-11	470	140	4¾ Diam. x 1⅛	FC	3.2	9.20
FC-12	370	165	3 11/32 x 3 11/32 x 1 19/64	FC	2.0	5.70

VERTICAL DEFLECTION OUTPUT TRANSFORMERS

Stancor No.	Turns Ratio Pri./Sec.	Primary Ohms Impedance†	Overall Dim., Inches	Mtg.	Net Each
A-8112	10:1	18000@12DCMa	2 x1¾x3¼	A	$3.00
A-8113	8.8:1	16500@10DCMa	2 x1¾x3¼	A	3.15
A-8115	10:1	19000@13DCMa	3 1/16x2½x2½	NV	5.35
A-8116	10:1	18000@10DCMa	3 1/16x2¼x2½	NV	5.34
A-8123*	11.4:1	17000@20DCMa	2 x1¾x3¼	A	2.97
A-8140	44:1	11000@20DCMa	3 1/16x2½x2½	NV	5.34
A-8141*	18:1	30000@10DCMa	2¼x3¾x2⅛	A	4.26
A-8142	8:1	19000@13DCMa	2⅝x2¼x3	NH	5.14
A-8143	10:1	14000@15DCMa	2¼x2¼x3⅝	A	3.44
A-8144	9:1	9500@30DCMa	2¼x1¾x3⅝	A	3.19
A-8145	9:1	11000@19DCMa	2⅝x2¼x2½	N1	4.29
A-8146*	6.9:1	6000@15DCMa 4700@50DCMa	2 x1⅞x3¼	A	3.03
A-8147*	6:1	3200@40DCMa	2 x1¾x3¼	A	2.94
A-8148*	8:1	6000@15DCMa 4700@50DCMa	2 x1⅞x3¼	A	3.44
A-8149*	6.9:1	11500@20DCMa	2 x1⅝x3¼	A	2.74
A-8150*	9:1	11000@19DCMa	2 x3¾x2 3/16	N2	4.14
A-8151	7.5:/15:1	8500@19DCMa	2¼x3¾x2¼	N1	3.60
VO-100*	9.2:1	7500@30DCMa	2⅛x3⅝x1⅞	A	3.47
VO-101*	12:1	16000@15DCMa	2¼x3⅝x1¾	A	3.37
VO-102*	6.5:1	6700@25DCMa	2⅝x4 x2¼	A	4.61
VO-103*	16:1	10000@15DCMa	2 x3¼x1½	A	4.19
VO-104*	46:1	15000@25DCMa	2⅝x4 x2⅛	A	4.42
VO-105*	44.5:1	24000@15DCMa	2 x3¼x1½	A	2.77
VO-106	35.5:1	35000@ 0	1⅝x2⅞x1½	A	2.52
VO-107	32:1	22000@ 0	1⅝x2⅞x1½	A	2.52
VO-108*	9:1	10000@25DCMa	2 x3¼x2	A	2.90

*Measured at 30 v., 60 cycles. *Autoformer type.

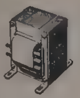
POWER TRANSFORMERS

All Primaries for 117 v., 60 cps. **All plate windings center ta**

Stancor No.	Plate V.	Plate Ma	Rec. Fil. V.	Rec. Fil. A.	Other Fil. Volts	Other Fil. A.	Mounting H x W x D, In.
P-5059*	675	200	5.0†	3.0	6.3CT	5.0	C/4⅝x3¾x4⅜
P-6315	740	275	5.0†	3.0	6.3CT	7.0	M/4¼x3¾x4½
P-8154	750	205	5.0	3.0	5.0 6.3	2.0 5.6	M/4¼x4¾x4½
P-8155	450	90	5.0	2.0	6.3	5.15	M/3¾x2 13/16x3⅜
P-8156	730	295	5.0	6.0	5.0 12.6CT	2.0 5.0	M‡/6⅛x 3 13/16x4¾
P-8157	770 470	195 105	5.0 5.0	3.0 2.0	6.3 6.3 5.0	7.65 0.6 2.0	M/4¾x3¾x4½
P-8158 For use in Voltage Doubler Circuits.	117	200			6.3 6.3 6.3	4.25 4.0 2.0	M‡/3½x3 7/16x4⅛
P-8159	720	250	5.0	3.0	5.0 6.3 6.3	2.0 8.0 0.6	M‡5 5/16x3 13/16x4¾
P-8160	720 330	185 65	5.0	3.0	6.45	12.0	M/4¼x3¾x4½
P-8161	770	230	5.0 5.0	3.0 2.0	6.3	9.0	M‡/5 9/16x3 13/16x4¾
P-8162	760	180	5.0†	3.0	6.3	9.0	M3‡/5½x4⅛x3 7/16
P-8163	740	190	5.0	3.0	6.3 6.3	7.75 1.2	M‡/5 9/16x3 13/16x4¾
P-8164	600	225	5.0	3.0	6.3	9.0	M‡/4⅛x3 7/16x4⅛
P-8165	700 440	180 70	5.0	3.0	6.3 6.3	2.0 10.0	M‡/4¾x3¾x4½
P-8166 May be used in series as 12.6v CT	680	330	5.0	6.0	6.3 6.3 6.3	2.5 5.0 5.0	M‡/5½x3 13/16x4¾
P-8167	560	400	5.0	6.0	6.3 6.3	4.5 8.5	M‡/5½x3 13/16x4¾
P-8168 May use in series as 12.6VCT	440 260	330 220	5.0	3.0	6.3 6.3	6.5 6.5 6.5	M‡/4⅞x3¾x4½
P-8169 May be used in series as 12.6v CT	760	220	5.0	3.0	6.3 6.3 6.3	1.2 5.0 7.0	M‡/4⅝x3¾x4½
P-8170 May be used in series as 12.6v CT	760	220	5.0	3.0	6.3 6.3 6.3	1.2 5.0 7.0	C‡/4¾x4x4¾
P-8171	750	225	5.0†	3.0	6.3 6.3	2.0 9.0	M3‡/5x3¾x4½
P-8172	540	200	5.0	3.0	6.3	8.5	M/4⅜x3⅛x3¾
P-8331	620	240	5.0	3.0	6.3 6.3	6.4 3.0	M‡/4½x3¾x4½
P-8332	560	260	5.0	5.0	6.3 6.3 6.3	7.1 1.2 .9	M‡/4 15/16x3¾x4½
P-8333	590	225	5.0†	3.0	6.3 6.3	11.4 .9	M3‡/4⅝x3¾x4½
P-8334	550	305	5.0	5.0	6.3 6.3	8.5 1.2	M‡/5⅛x3¾x4½
P-8335	600	325	5.0	6.0	6.3 6.3	8.8 1.5	M‡/5⅛x3¾x4½
P-8336 For use in Voltage Doubler Circuits.	117	280			6.3 6.3 6.3	9.5 0.6 1.2	M‡/4¼x3¾x4½
P-8337	630	225	5.0	3.0	6.3	8.25	M3/4½x3¾x4½
P-8338	630	310	5.0	6.0	6.7 6.4	10.0 1.6	M‡/5⅜x3⅞x4¾
P-8339	650	255	5.0	3.0	12.6CT	5.25	C‡/4⅞x3¾x5
P-8340	710	270	5.0	6.0	6.3 6.3 6.3	9.5 1.65 2.4	M‡/5½x3¾x4½
P-8341	720 440	175 110	5.0 5.0	3.0 2.0	12.6CT	5.45	C‡/4⅞x3¾x4⅞
P-8342	730	260	5.0	6.0	6.3 6.3	8.85 1.2	M‡/5⅜x3¾x4½
P-8343	720 440	220 110	5.0 5.0	3.0 2.0	12.8CT	5.8	C‡/4⅞x3¾x5¼
P-8344*	730 400	170 84	5.0 5.0	3.0 2.0	12.6	4.25	C‡/4⅞x3¾x4½
P-8345	700	215	5.0	3.0	6.3 6.3	9.0 1.2	M‡/5x3¾x4½
P-8346	800 660	180 180	5.0 5.0	3.0 3.0	....	....	C‡/4⅝x3¾x4¾
P-8347	770	230	5.0	3.0	5. 6.45 6.3	2 7.4 1.6	M‡/5 9/16x3¾x4½
P-8348	730	270	5.0	6.0	6.7	4.5	M‡/4⅞x3¾x4½
P-8349	720	260	5.0	6.0	5.0 6.3	2 8.85	M‡/5½x3¾x4½
P-8350	700	270	5.0	6.0	5.0 6.3 6.6	2 1.6 7.8	M‡/5½x3¾x4½
P-8351	720	240	5.0	6.0	6.5	9.3	M‡/4 15/16x3¾x4½
P-8352	580	240	5.0	3.0	12.6CT	5.25	C‡ 4⅞x3¾x4¾
P-8353	530	300	5.0	6.0	12.6CT	6.0	C3‡ 5¾x3¾x5¼
P-8354	520	325	5.0†	6.0	6.3	11	M5‡/5¼x3¾x4½
PM-8411	750	150	5.0	3.0	6.3CT	4.5	M/3⅞x3½x4⅛
PM-8412	800	200	5.0	3.0	6.3CT	5.0	M/3⅞x3¾x4½

*Primary for 117/107 volts. †Center tapped. ‡With copper
ing band to reduce external magnetic field.

Stancor TV Transformers



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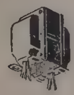

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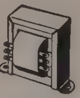

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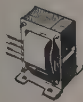

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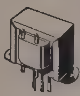

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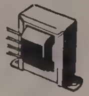

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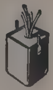

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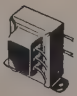

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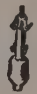


WC

ISOLATION TESTING TRANSFORMER

No. P-6415—Handles almost any TV or radio receiver on ee standard receptacles provide 105, 115 and 125 v. out-117 v. AC from the line for testing. May be used to cor- or low line voltage. Overall Height: 5⅜". Base Area: ½". Mounting: KC. Shipping Weight, 17.0 lbs. $\$23^{52}$

AUDIO OUTPUT TRANSFORMERS

Application	Pri. Ma	Max. Watts	Dim, In. H. x W. x D.	Mtg. Type	Net Each
1 p. 7K —8 ohms V.C.	40	10	2 x3¼x1¾	A	$2.55
P.P. plates, 14K ohms, to 500/15/8/4 ohms line, V.C.	55	20	3 1/16x2⅝x2⅜	C	6.53
1 p. 2K ohms 3.5 ohms V.C.	50	5	1⅜x2⅝x1⅜	A	1.98
Single plate, 2000 ohms to 3.2 ohm V.C.	50	3	1 3/16x2⅛x1	A	1.39
Single or P.P. plates. 4K—14K ohms to V.C.	40	8	1⅝x2⅞x1½	Q	3.37
A-3823 except 6K-10K ohms	75	8	2 x3¼x2	Q	3.30
Single plate, 1.5K-4.5K ohms to V.C.	75	8	2 x3¼x1⅝	Q	2.63
P.P. plates, 3K-10K ohms to Voice Coil	60†	20	2 11/16x3 5/16x2¼	J	4.50
Single plate, 1.5K-10K ohms to V.C.	55	10	1⅝x2⅞x1½	Q	3.37
Single or P.P. plates, 4K-14K ohms to V.C.	40	8	2 x2⅜x1½	J	3.32
P.P. plates, 4K-14K ohms to Voice Coil	40‡	18	2 5/16x2⅞x2	J	4.07
Single or P.P. plates, 4K-14K ohms to V.C.	35	4	1⅜x2⅜x1⅜	Q	2.90
P.P. plates, 4K-14K ohms to Voice Coil	50*	18	2 x3¼x2	Q	4.15
1 p. 2K ohms —4 ohm V.C.	60	5	1⅜x2⅜x1⅜	A	1.48
1 p. 5K ohms —4 ohm V.C.	40	5	1⅜x2⅜x1⅜	A	1.48
1 p. 7K ohms —4 ohm V.C.	30	5	1⅜x2⅜x1⅜	A	1.52
1 p. 10K ohms —4 ohm V.C.	30	5	1⅜x2⅜x1⅜	A	1.48
P.P. Plates, 4K-14K ohms to V.C.	40‡	15	2¼x3¾x2¼	Q	4.39
1 p. 7.6K ohms —3.2 ohm V.C.	32	5	1⅜x2⅜x1⅜	A	1.77

each side. †60 ma each side. ‡40 ma each side.

HORIZONTAL BLOCKING-OSCILLATOR TRANSFORMERS

r	Turns Ratio Pri./Sec.	Dimensions, In. H. x W. x D.	Mtg. Type	Shpg. Wt.	Net Each
	2:1	1⅜ x 1½ x 2½	A	0.4 lbs.	$2.16
	2:1	1¾ x 1½ x 2 5/16	TD	0.4 lbs.	3.44

VERTICAL BLOCKING-OSCILLATOR TRANSFORMERS

Stancor No.	Turns Ratio Pri./Sec.	Ht., In.	Base Area	Mtg. Ctrs.	Mtg. Type	Shpg. Wt.	Net Each
A-8111	1:4.2	1⅜	1½x2½	2	A	0.4	$1.98
A-8121	1:4.2	1¾	1½x2 5/16	1 15/16	TD	0.4	2.64
A-8122	1:4.2	1 9/16	1 3/16x1 3/16	1 13/64	TS	0.3	3.91
A-8124	*	1⅝	1⅝x2⅞,	2⅜	A	0.7	2.77
A-8125	1:4.2	1 3/16	2 3/16x1¼	1¾	A	0.4	1.95
A-8126‡	1:1.5	1¾	1½x2	1¾	S	0.5	1.98
VBO-200‡	1:1.5	1⅜	1½x2½	2	A	0.5	2.10
VBO-201‡	1:3.33	1 3/16	2 3/16x1¼	1¾	A	0.4	2.10

*Sec. #1 1:0.48. Sec. #2 1:1. ‡Copper shield on coil and core.

WIDTH AND LINEARITY CONTROLS—MTG. WC

Order WC-1 for 5/16" mtg. hole; WC-1A for 7/16", etc.

Stancor No.	Application	Inductance, Mh	Ohms	Shpg. Lbs.	Net Each
WC-1,A	Width Coil	.050-.50	0.53	0.3	$1.24
WC-2,A	Tapped Linearity Coil	.55-4.6	8.3	0.3	1.27
WC-4,A	Width Coil	1.70-.610	1.0	0.3	1.52
WC-5,A	Width Coil and/or Linearity Coil	4-39	32	0.3	1.40
WC-6,A	Tapped Linearity Coil	1.3-4.1	5.6	0.3	1.67
WC-7,A	Width Coil	.5-3.5	2.3	0.3	1.67
WC-8,A	Width Coil	1.0-10.0	8.0	0.3	1.13
WC-9,A	Width Coil with keyed winding	3.2-9	28.0	0.3	1.58
WC-10,A	Width Coil with AGC	4.0-28	32.0	0.3	2.17
WC-11	Tapped Width Coil	2.3-11.8	10.0	0.3	1.57
WC-12*	Width Coil with AGC	4-30	27	0.3	1.83
WC-13*	Width Coil with AGC	4-30	27	0.3	1.83
WC-14,A	Width Coil	45-215	130	0.3	1.57
WC-15†	Width Coil with AGC	3.1-21	18.8	0.3	1.48
WC-16,A	Width Coil/AGC, tapped	1.5-11	9	0.3	1.58
WC-17	Tapped Width Coil	47-110	175	0.3	1.33
WC-18,A	Width Coil	4-29	29	0.3	1.39

*Mtg. Type WD, 1¾" mtg. centers. †Less core.

FILTER CHOKES

Stancor No.	Inductance, Henries, at Rated DC Ma	Inductance, Henries, at 75% Ma	Inductance, Henries, at 115% Ma	DC Ohms	Mtg. Type	Net Each
C-1001	10.5hy. 110ma	11.5	9.0	225	A	$3.59
C-1080	3.5hy. 50ma	4.0	2.8	200	A	1.65
C-1215	9.0hy. 50ma	10.5	8.0	500	A	1.60
C-1325	5.0hy. 50ma	5.8	4.2	250	A	1.65
C-1410	4.0hy. 175ma	4.7	3.5	100	C	4.54
C-1411	4.5hy. 200ma	5.5	3.8	80	C	5.67
C-1412	4.0hy. 250ma	4.5	3.5	60	C	6.96
C-1646	5.0hy. 200ma	7.0	3.7	90	C	6.80
C-1703	4.0hy. 250ma	4.5	3.5	60	BV	6.20
C-1706	4.5hy. 50ma	5.5	3.5	300	A	1.28
C-1707	7.0hy. 50ma	8.5	5.0	550	A	1.42
C-1709	9.0hy. 85ma	10.5	7.5	250	A	2.40
C-1721	8.5hy. 200ma	9.5	7.5	120	NV	7.50
C-1722	8.0hy. 300ma	8.5	7.0	80	NV	11.04
C-2303	2.5hy. 130ma	3.0	2.1	100	A	2.25
C-2304	2.3hy. 150ma	2.6	2.0	60	A	2.25
C-2309	3.0hy. 150ma	3.6	2.5	90	A	2.57
C-2325	2.0hy. 200ma	2.5	1.5	60	A	2.85
C-2326	1.0hy. 300ma	1.5	0.6	43	A	2.90
C-2327	1.5hy. 200ma	1.7	1.3	85	A	1.80
C-2328	0.8hy. 375ma	1.0	0.65	25	A	3.60
C-2334	2.8hy. 300ma	3.3	2.2	60	A	3.53

FILAMENT TRANSFORMERS

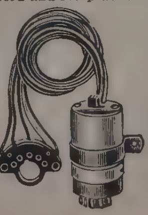
Stancor No.	Secondary Volts	Secondary Amps	Pri. Volts	RMS V. Insul.	Overall, In. H. x W. x D.	Mtg. Type	Net Each
P-3064	6.3CT	6.0	117	2500	3⅛x2½x2⅞	BV	$5.42
P-6134	6.3CT	1.2	117	3000	1⅝x2¾x1¾	A	2.10
P-6308	6.3CT	10.0	117/107	2500	3½x2⅞x2⅞	BV	6.59
P-6463	6.0CT 6.5CT 7.0CT	13	117	2000	3⅜x2 13/16x3⅜	BV	7.85
P-8190	6.3	1.2	117	5000	2 x3¼x1¾	A	2.76
P-8191	6.3	1.2	6.3	5000	2 x3¼x1¾	A	2.97

TV BOOSTER TRANSFORMER

Stancor No. P-8181— Plate supply: 150 v. AC, half wave; 25 ma DC. Fil.: 6.3 volts, 0.5 amps. Ht.: 2". Base Area: 2 7/16" x 1¾". Mtg. Ctrs.: 2". Mount.: VE. Shpg. Wt., 0.8 lb. Net Each **$3.29**

PORTABLE TV ISOLATION TRANSFORMER

Stancor No. P-6371—Isolates AC-DC portable TV receivers (hot chassis) from 117 v. line. Electrostatic shield; primary line and cord; secondary receptacle. Wattage, 175. Height, 5 5/16". Base size, 4 9/16" x 5¼". Mounting type TE, similar to TD with line cord and receptacle. Shipping Weight, 9 lbs. Net Each. $\$19^{34}$



CR TUBE BOOSTER

Compact, self-contained CRT Booster that can be used with all electromagnetic picture tubes, regardless of size, where dimming is due to low cathode emission. No connections to solder—has both male and female connections. No AC line connections to make. Two levels of brilliance. Does not change CRT space requirements. Features autotransformer construction. Easy to install. 15" leads between connector and booster plug. **Size:** 3½" high, 1½" dia. Furnished with bracket and screws for chassis or cabinet mounting. **Stancor No. P-8192 CRT Booster**—Net Each.............. $\$3^{27}$

Miniature Transformers

DO-T AND DI-T TRANSISTOR TRANSFORMERS

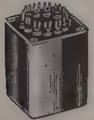
DO-T

Revolutionary transistor units shown **ACTUAL SIZE!** Handle 100 mw single ended, 500 mw push-pull (DC ma is for single ended). Wide response: Approx. 2 db, 150-10,000 cps for DO-T units; 200-10,000 cps for DI-T's. Low distortion, high efficiency. Rugged hermetically sealed case per MIL-T-27A specs. Anchored, solderable plastic leads for printed circuits. **Size:** 5/16" dia. x 13/32" l., DO-T; 5/16" dia. x 1/4" l., DI-T.

UTC DI-1
TF 4RX 13 T
BLU: VL-BK
10K: 20000
DI-T

UTC Type	Net Each	††	Pri. Imped., Ohms	Sec. Imped., Ohms	UTC Type	Net Each
DO-T1	$6.00	a	20K/30K, 0.5 ma	800/1200	**DI-T1**	$6.00
DO-T2	5.40	b	500/600, 3 ma	50/60	**DI-T2**	5.40
DO-T3	5.40	b	1K/1.2K, 3 ma	50/60	**DI-T3**	5.40
DO-T4	5.40	b	600, 3 ma	3.2		
DO-T5	5.40	b	1.2K, 2 ma	3.2	**DI-T5**	5.40
DO-T6	6.00	b	10K, 1 ma	3.2		
DO-T7	6.60	c	200K	1K		
DO-T8	4.80	d*	3.5 hys. @ 2 ma	2.5 hys.‡‡	**DI-T8**	4.80
DO-T9	6.60	e	10K/12K	500/600 CT	**DI-T9**	6.60
DO-T10	6.60	f	10K/12K	1.2K/1.5K CT	**DI-T10**	6.60
DO-T11	6.60	f	10K/12K	2K/2.5K CT	**DI-T11**	6.60
DO-T12	5.70	b	150/200 CT	12/16		
DO-T13	5.70	b	300/400 CT	12/16		
DO-T14	6.00	b	600/800 CT	12/16		
DO-T15	6.00	b	800/1070 CT	12/16		
DO-T16	6.00	b	1K/1330 CT	12/16		
DO-T17	6.00	b	1.5K/2K CT	12/16		
DO-T18	6.30	b	7.5K/10K CT	12/16		
DO-T19	6.00	b	300 CT	600	**DI-T19**	6.00
DO-T20	6.00	b	500 CT	600	**DI-T20**	6.00
DO-T21	6.00	b	900 CT	600	**DI-T21**	6.00
DO-T22	6.00	b	1500 CT	600	**DI-T22**	6.00
DO-T23	6.90	a	20K/30K CT	0.8K/1.2K CT	**DI-T23**	6.90
DO-T24	7.50	c	200K CT	1K CT		
DO-T25	7.20	a	10K/12K CT	1.5K/1.8K CT	**DI-T25**	7.20
DO-T26	5.70	d†	6 hys. @ 2 ma	4.5 hys.‡‡	**DI-T26**	5.70
DO-T27	4.80	d‡	1.25 hys. @ 2 ma	0.9 hy.‡‡	**DI-T27**	4.80
DO-T28	4.80	d§	0.3 hy. @ 4 ma	0.1 hy.‡‡	**DI-T28**	4.80
DO-T29	5.70	b	120/150 CT	3.2/4		
DO-T30	5.70	b	320/400 CT	3.2/4		
DO-T31	6.00	b	640/800 CT	3.2/4		
DO-T32	6.00	b	800/1K CT	3.2/4		
DO-T33	6.00	b	1060/1330 CT	3.2/4		
DO-T34	6.00	b	1.6K/2K CT	3.2/4		
DO-T35	6.30	b	8K/10K CT	3.2/4		
DO-T36	7.50	a	10K CT	10K CT	**DI-T36**	7.50
DO-TSH	.90		High mu shield and cover; 25 db		**DI-TSH**	.90

*630 ohms. †2100 ohms. ‡100 ohms. §25 ohms. ††Application: **a**—Interstage. **b**—Output. **c**—Input. **d**—Reactor. **e**—Driver or output. **f**—Driver. **g**—Matching. ‡‡**DI-T** primary impedance.



ULTRACOMPACT HI-FI AUDIOS

Compact, rugged units are hum balanced with additional multiple alloy shields on Nos. A-11 and A-21. Level +15 dbm except where otherwise noted. Top and bottom mounting. Die cast case, 1 1/2" x 1 1/2" x 2" h. Weight, 1/2 lb.

UTC Type	Application	Primary Impedance, Ohms	Sec. Imped., Ohms	#	Net Each
A-10	Input	50, 125/150, 200/250, 333, 500/600	50K split	a	$13.20
A-11	Shield. Input	50, 200, 500	50K CT	b	12.00
A-12	Input	Same as A-10	80K split	a	12.00
A-14	Input	39	50K split	a	10.80
A-15	Interstage*	10K/2.5K split**	2K/500 sp.	c	9.90
A-16	Pl. to grid	15K	60K	a	9.90
A-17	Pl. to grid	15K, 8 ma	60K	c	12.00
A-18	Pl. to p-p	15K split	80K CT	a	12.00
A-19	Pl. to p-p	15K, 8 ma	80K CT	c	12.00
A-20	Mixing	Same as A-10	Same as pri.	d	14.40
A-21	Shield Mix'g	50, 200/250, 500/600	Same as pri.	e	12.00
A-22	Tr. to line*	500 CT	500/125 spl.	c	9.90
A-23	Tr. to V.C.*	500 CT	16/4 split	c	9.90
A-24	Pl. to line	15K split	See A-10 pri.	f	12.90
A-25	Pl. to line	15K, 8 ma	See A-10 pri.	c	12.00
A-26	P-p to line	30K CT	See A-10 pri.	f	13.20
A-27	Input	100K split	See A-10 pri.	b	12.00
A-28	Tr. to V.C.	48 CT, 5 w.	16, 8, 4	c	10.20
A-30	Reactor: 250 hys. @ 5 ma†; 65 hys @ 10 ma‡				10.20
A-32	Reactor: 60 hys. @ 15 ma§; 15 hys @ 30 ma††				6.60
A-33	Hipermalloy shield fits A units, 20 db				2.70

*+30 dbm. †6K ohms. ‡1.5K ohms. §2K ohms. ††500 ohms. **8 ma. #Frequency response (±2 db), cps: **a**—20-20,000. **b**—30-20,000. **c**—40-20,000. **d**—10-50,000. **e**—30-30,000. **f**—20-40,000.

WE STOCK THE COMPLETE UTC LINE. WRITE FOR INFORMATION ON NEW OR UNLISTED ITEMS FOR GENERAL OR SPECIAL NEEDS.

HERMETIC AUDIO UNITS

RC-25

RC-50

SM

Proved to MIL-T-27A, these compact units have response
level ratings similar to Ouncers for RC-25 case; Ultracom
units for RC-50 case; to SSO units for SM case. **RC-25 Ty**
1 13/32" x 61/64" x 1 7/16" h. (Wt., 1.5 oz.). **RC-50 Types:** 1 5/8" x 1
2 5/16" h. (Wt., 8 oz.). **SM Types:** 11/16" x 1/2" x 29/32" h. (Wt., 0.8

UTC Type	Application	Pri. Imped., Ohms	Sec. Imped., Ohms	#
H-1	Line to grid	50, 200 CT, 500 CT	50K	a
H-2	Mike to grid	82, 50 ma	135K	a
H-3	Pl. to grid	15K	60K	a
H-4	Pl. to grid	15K, 4 ma	60K	a
H-5	Pl. to p-p	15K	95K CT	a
H-6	Pl. to p-p	15K, 4 ma	95K split	a
H-7	Pl. to line	20K CT, 4 ma	150/600	a
H-8	Mixing	150/600	600 CT	a
H-9	Input	150/600	1 meg.	a
H-10	Pl. to grid	10K	1 meg.	a
H-11	Reactor: 300 hys, 50 hys @ 3 ma, 6000 ohms			a
H-12	Line to p-p	50, 200 CT, 500 CT	50K CT	a
H-13	Interstage	10K/2.5K split	2K/.5K split	a
H-14	Interstage	10K/2.5K split	4K/1K split	a
H-15	Tr. to line	1.5K CT	500/125 split	a
H-16	Tr. to V.C.	2K/4K CT	8/16	a
H-19A	Input*	250 CT/500 CT	50K/100K CT	b
H-20	Interstage	15K split	80K split	b
H-21	Pl. to p-p	15K, 8 ma	80K split	b
H-22	Pl. to line	15K, 8 ma	50/200, 125/500	b
H-23	P-p to line	30K split	As above	b
H-24	Reactor: 250 hys. @ 5 ma†, 65 hys. @ 10 ma‡			b
H-25	Mixing	500 CT	125/500	b
H-26	Interstage	10K/2.5K split	2K/500 split	b
H-27	Tr. to V.C.	500 CT	16/4 split	b
H-280	Interstage	200 CT	400 split	b
H-281	Tr. to V.C.§	48 CT	16, 8, 4	b
H-282	Tr. to V.C.††	20 CT	16, 8, 4	c
H-290	Shld. chopper	2500 e. s.	100K	b
H-291	Max. shld. chop.	2000/500 e. s.	312K	c
H-30	Input	50	62, 500	d
H-31	Pl. to grid	10K	90K	d
H-32	Pl. to line	10K, 3 ma	200	d
H-33	Output	30K, 1 ma	50	d
H-35	Reactor: 100 hys., 50 hys. @ 1 ma, 4400 ohms			d
H-36	Interstage	25K, 0.5 ma	1K	d
H-37A	Tr. output	500 CT	50	d
H-38	Interstage	10K CT, 2 ma	1.2K CT	d
H-39	Interstage	10K CT, 2 ma	2K CT	d
H-40A	Tr. output	500 CT	600 CT	d
H-41A	Tr. output	1500 CT	600 CT	d

*Has 75 db shielding. †6000 ohms. ‡1500 ohms. §5 watts.
watts. #Case: **a**—RC-25. **b**—RC-50. **c**—RC-62. **d**—SM.

Ouncer Case

OUNCER AND PLUG-IN AUDIO UNITS

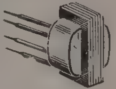
UTC Ouncer components are only 7/8" dia., but provide ±1 db, 30-20,000 cps response (except Nos. O-14 and O-15). "P" units are the same except in bakelite case with octal plug. Max. level +8 dbm. No. O 16 has heavy shielding (1 1/16" dia.); P-16 has 9-pin plug (1 3/16" dia.). Wt., 4 oz. max.

UTC No.	Net Each	Application	Pri. Imped., Ohms	Sec. Imped., Ohms	UTC No.
O-1	$ 7.80	Input	50, 200, 500	50K	**P-1**
O-2	7.80	P-p input	50, 200, 500	50K CT	**P-2**
O-3	7.50	Input	7.5/30	50K	**P-3**
O-4	6.60	Pl. to grid	15K	60K	
O-5	6.60	Pl. to grid	15K, 2 ma	60K	
O-6	7.50	Pl. to p-p	15K	95K CT	**P-6**
O-7	7.50	Pl. to p-p	15K, 2 ma	95K CT	**P-7**
O-8	7.80	Pl. to line	15K	50, 200, 500	**P-8**
O-9	7.80	Pl. to line	15K, 2 ma	50, 200, 500	**P-9**
O-10	8.40	P-p to line	30K CT	50, 200, 500	**P-10**
O-11	7.80	Cryst. out.	50K	50, 200, 500	**P-11**
O-12	7.80	Mixing	50, 200, 500	50, 200, 500	**P-12**
O-13	6.30	Reactor: 300 hys.; 50 hys. @ 3 ma§			
O-14	7.50	50:1 input	200	500K	
O-15	7.50	10:1 P/G	15K	1 meg.	**P-15**
O-16	10.20	Shld. input	250 CT	50K	**P-16**
O-17	1.50	Hipermalloy shield, 25 db, for Ouncers			
O-18	8.40	Tr. intrstg.	10K split	2K split	
O-19	8.40	Tr. intrstg.	10K split	4K split	
O-20	8.40	Tr. to line	1.5K CT	500 split	
O-21	7.80	Tr. to V.C.	2K/4K CT	8/16	
O-22	7.80	Tr. to V.C.	500/400 CT	4/3.2	
O-23	6.00	Reactor: 7 @ 3, 3.5 @ 10*†			
O-24	5.70	Reactor: 1.6 @ 3, .8 @ 10*‡			

*Hys. @ ma. †230 ohms. ‡25 ohms. §6000 ohms.

Inductors, Filters, Audios

UB-SUBOUNCERS AND SUBOUNCERS



Miniature nickel iron core units for vacuum tube and transistor use. Vacuum sealed. Nylon bobin; plastic leads. No mounting facilities. **SSO Sub-Subouncers:** Approx. 2 db, 140-10,000 cps; +20 VU except inputs +7 VU. Size, 7/16" x 3/4" x 43/64"; wt., .02 lb. **SO Subouncers:** Approx. 2 db, 100-10,000 cps; +24 VU uts +10 VU. Size, 19/32" x 43/64" x 7/8"; wt., .03 lb.

t ch	Application	Pri. Imp., Ohms	Sec. Imp., Ohms	UTC SO-	Net Each
50	Input	50/200	62.5K/250K	1	$3.00
30	Interstage	10K, .25 ma	90K	2	3.00
90	Pl. to line	10K/25K*	200/500	3	3.00
90	Output	30K, 1 ma	50	4	3.00
90	Reactor	50 hys. @ 1 ma	4400 ohms♯	5‡	3.00
90	Output	100K, .5 ma	60	6	3.90
00	Tr. intrstg.	20K/30K†	80/1200	7	3.00
90	Tr. intrstg.	10K, 1 ma	2K CT	8	3.60
00	Tr. to V.C.	10K, 2 ma	16	....	.....
..	Tr. to V.C.	500 CT	3.2	9	3.60
00	Tr. to V.C.	10K, 2 ma	3.2	....	.....
..	Tr. to V.C.	2K/4K CT	8/16	10	3.60
00	Tr. output	500/600§	50/60	....	.....
00	Tr. output	1K/1.2K††	50/60	....	.....
50	Input	200K	1K	....	.....
30	Tr. intrstg.	10K/25K	200/500 CT	....	.....
30	Tr. intrstg.	20K/30K CT	.8K/1.2K CT	....	.....
00	Tr. output	1.2K/1.5K††	3 2/4	....	.....
90	Tr. output	10K/12.5K**	500/600 CT	....	.....
90	Output	7.5K/9.4K CT	3.2/4	....	.....
20	Matching	500 CT	600 CT	....	.....
20	Output	1.5K CT	600 CT	....	.....
00	Chopper	200K CT	1K CT	....	.....
80	Tr. intrstg.	10K/12K CT	1.5K/1.8K CT	....	.....
00	Reactor: 4 hys. @ 5 ma, 650 ohms				
00	Reactor: 1.5 hys. @ 5 ma, 160 ohms				

†0.5 ma. ‡Resis., 2675 ohms. §3.5 ma. **2 ma. ♯DC resis.

INTERSTAGE AND LINE FILTERS

Hermetically sealed (proved to MIL-T-27A) units are provided in stock types listed to cover every electronic need. Case, 1 5/16" x 1 11/16" x 1 5/8" h. (wt., 6 oz.), BMI, LMI, BML and BTI types; 2 1/2" h., others (wt., 9 oz.). **Frequency:** Indicated by stock number in cps; example, HMI-200 is 200 cps cutoff. **BMI Types:** Bandpass interstage filter, 10K ohms to grid, provide 2:1 gain. Attenuation approx. 2 db in passband (±3% from center frequency), then attenuates at 40 db per octave. **BTI Types:** Same as BMI, but 10K ohms in and out for transistor use. **HMI Types:** High pass, 10K ohms in Attenuation less than 6 db at cutoff frequency, down 0.67 cutoff frequency. **LMI Types:** Low pass 10K ohms t; attenuation less than 6 db at cutoff frequency, down .5 cutoff frequency. **HML Types:** High pass same as HMI 600 ohms in and out. **LML Types:** Low pass same as t 500/600 ohms in and out. **BML Types:** Bandpass same but 500/600 ohms to grid; provide 9:1 gain.

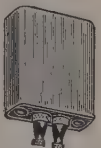
pe	Net Ea.	UTC Type	Net Ea.	UTC Type	Net Ea.
	$27.00	**LMI-1000**	$30.00	**HMI-3000**	$30.00
	27.00	**LMI-1500**	30.00	**BML-400**	27.00
	27.00	**LMI-2000**	30.00	**BML-1000**	27.00
	27.00	**LMI-2500**	39.00	**HML-200**	33.00
	27.00	**LMI-3000**	30.00	**HML-300**	33.00
	27.00	**LMI-4000**	30.00	**HML-500**	33.00
0	27.00	**LMI-5000**	30.00	**HML-1000**	33.00
0	27.00	**LMI-10000**	30.00	**LML-1000**	30.00
0	27.00	**BTI-60**	27.00	**LML-1500**	30.00
0	27.00	**BTI-100**	27.00	**LML-2000**	30.00
0	27.00	**BTI-120**	27.00	**LML-2500**	30.00
0	27.00	**HMI-200**	30.00	**LML-4000**	30.00
00	27.00	**HMI-400**	30.00	**LML-8000**	30.00
	30.00	**HMI-500**	30.00	**LML-10000**	30.00
	30.00	**HMI-800**	30.00	**LML-12000**	30.00
	30.00	**HMI-1000**	30.00		
	30.00	**HMI-2000**	30.00		

MINIFILTERS

Extremely miniaturized, yet almost equal in characteristics to the standard interstage filters above. BPM units: Hermetically sealed (proved to MIL-T-27A) case 3/4" x 3/4" x 1 1/8" h. (1 oz.); others 1" x 1" x 1 3/8" h., (2 1/4 oz). All types are 10K ohms in and out; BPM units provide additional tap for grid output, 2:1 gain. **Frequency:** Indicated by stock number in cps. BPM Types: Bandpass filters attenuate approx. 2 db in passband (±3% from center frequency), then 35 db per octave. **HPM Types:** High pass filter with 6 db attenuation at cutoff frequency, 30 db at 0.67 cutoff. pes: Low pass with less than 6 db attenuation at cutoff y, 30 db at 1.5 cutoff.

ype	Net Ea.	UTC Type	Net Ea.	UTC Type	Net Ea.
0	$27.00	**BPM-10000**	$27.00	**LPM-1000**	$30.00
0	27.00	**HPM-500**	30.00	**LPM-2000**	30.00
00	27.00	**HPM-1000**	30.00	**LPM-3000**	30.00
90	27.00	**LPM-200**	30.00	**LPM-5000**	30.00
00	27.00	**LPM-500**	30.00		

HERMETIC "M" TYPE TOROIDS



Permalloy dust toroids provide maximum Q quality and stability in minimum size. Hermetically sealed (proved to MIL-T-27A) and laboratory adjusted to 1% tolerance; excellent voltage and temperature stability. Toroid plus magnetic case equals 80 db shielding. **MQA Types:** Have Q of 40 at 500 cps, 160 at 5 kc, approx. 40 at 20 kc. Size, 11/16" x 1 9/32" x 1 23/32" h.; wt., 4 oz. **MQB Types:** Have Q of 40 at 250 cps, 250 at 3 kc, approx. 40 at 20 kc. Size, 1 3/16" x 2 9/16" x 2 13/16" h.; wt., 14 oz **MQD Types:** Have Q of 40 at 5 kc, 185 at 50 kc, approx. 40 at 300 kc. Size, 11/16" x 1 9/32" x 1 23/32" h.; wt., 4 oz. **MQE Types:** Have Q of 20 at 600 cps, 140 at 10 kc, approx. 40 at 40 kc. Size, 1/2" x 1 1/16" x 1 7/32" h.; wt., 1.5 oz.

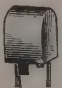
UTC Type	Ind., Hys.	Net Each	UTC Type	Ind., Hys.	Net Each	UTC Type	Ind., Hys.	Net Each
MQA-1	.007	$ 7.50	**MQA-19**	22.0	$18.00	**MQD-6**	.020	$21.00
MQA-2	.012	7.80	**MQB-1**	.010	12.90	**MQE-1**	.007	7.20
MQA-3	.020	8.10	**MQB-2**	.030	13.20	**MQE-2**	.012	7.50
MQA-4	.030	8.40	**MQB-3**	.070	13.50	**MQE-3**	.020	7.80
MQA-5	.050	8.70	**MQB-4**	.120	13.80	**MQE-4**	.030	7.80
MQA-6	.070	9.00	**MQB-5**	.50	14.10	**MQE-5**	.050	8.10
MQA-7	.120	9.30	**MQB-6**	1.0	14.40	**MQE-6**	.070	8.40
MQA-8	.20	9.60	**MQB-7**	2.0	14.70	**MQE-7**	.100	8.40
MQA-9	.30	9.90	**MQB-8**	3.5	15.00	**MQE-8**	.150	8.70
MQA-10	.50	10.20	**MQB-9**	7.5	15.90	**MQE-9**	.250	8.70
MQA-11	.70	10.50	**MQB-10**	12	16.80	**MQE-10**	.40	9.00
MQA-12	1.0	10.80	**MQB-11**	18	18.00	**MQE-11**	.60	9.00
MQA-13	1.5	11.10	**MQB-12**	25	19.20	**MQE-12**	.90	9.30
MQA-14	2.5	11.40	**MQD-1**	.002	15.00	**MQE-13**	1.5	9.90
MQA-15	4.0	12.00	**MQD-2**	.003	15.60	**MQE-14**	2.0	10.80
MQA-16	6.0	12.90	**MQD-3**	.005	16.20	**MQE-15**	2.8	12.00
MQA-17	10.0	13.80	**MQD-4**	.007	16.80			
MQA-18	15.0	15.00	**MQD-5**	.012	18.00			

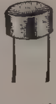
TYPE MQL LOW FREQUENCY TOROID

Hermetically sealed to MIL-T-27A specs, all units MIL Type TF4RX20YY. Inductance values lab. adjusted to 2% tolerance at 1 volt, 60 cycles. Temperature stability: below 3.5%, −55° C to +85° C. Two windings brought to four terminals permit series, parallel, center tapped or transformer type connections. Case 1 13/16" diameter, 2 1/2" high. Square mounting, 1 1/2" x 1 1/2", 6-32 screw. Cutout 1 1/2" diameter. Weight, 1 lb.

UTC No. MQL-	Hys. (0 DC)		Net Each	UTC No. MQL-	Hys. (0 DC)		Net Each
	Series	Parallel			Series	Parallel	
0	1	.25	$24.00	3	200	50	$25.50
1	10	2.5	24.00	4	400	100	27.00
2	20	5	24.00	5	2500	625	28.50

MINIDUCTORS

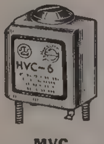




Ultraminiature high Q units hermetically sealed to MIL-T-27A, Grade 5, are ideal for transistor and printed circuit use. ML types are in hipermalloy shield case; others are molded permalloy dust toroids. Excellent temperature stability: 1%, −55° C to +100° C. **Types ML-1 thru ML-4:** Adjusted to 3% at 1 v., 1 kc. Q is 22 at 2 kc; over 10, 300 cps to 10 kc. **Types ML-5 thru ML-10:** Adjusted to 3% at 1 v., 0.4 kc. Q is 21 at 1 kc; over 10, 150 cps to 5 kc. Size, 13/32" x 15/32" x 9/16" h. (wt., 0.1 oz.), for all ML types. **Type MM:** Adjusted to 2%. Q is 60 at 20 kc; over 13 from 2 kc to 250 kc. Size, 7/16" dia. x 1/4" h. (wt., 0.1 oz.). **Type MH:** Adjusted to 2%. Q is 90 at 100 kc; over 20 from 10 to 550 kc. Size, 7/16" dia. x 1/4" h. (wt., 0.1 oz.).

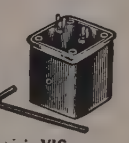
UTC Type	Induct., Hys.	Net Each	UTC Type	Induct., Hys.	Net Each	UTC Type	Induct., Hys.	Net Each
ML-1	.25	$7.20	**ML-7**	6.0	$7.50	**MM-3**	.008	$6.30
ML-2	.40	7.20	**ML-8**	10	7.50	**MM-4**	.0125	6.60
ML-3	.70	7.20	**ML-9**	25	7.80	**MH-1**	.0006	6.00
ML-4	1.4	7.50	**ML-10**	60	8.10	**MH-2**	.0015	6.00
ML-5	2.5	7.50	**MM-1**	.003	6.00	**MH-3**	.0025	6.30
ML-6	4.0	7.50	**MM-2**	.005	6.00	**MH-4**	.006	6.60

VARIDUCTORS



MVC

Variable indicators ideal for oscillators, tuned circuits, equalizers, etc. **HVC Types:** Hermetically sealed (proved to MIL-T-27A) and provide maximum Q and stability; adjustable −70% to +200% of mean value. Size, 25/32" x 1 1/8" x 1 7/32" h. (wt., 2 oz.). **VIC Types:** Adjustable −45% to +85% of mean value; die cast case. Size, 1 1/4" x 1 11/32" x 1 7/16" h. (wt., 5 1/2 oz.).

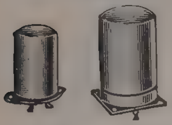


VIC

UTC Type	Mean Hys.	Net Each	UTC Type	Mean Hys.	Net Each	UTC Type	Mean Hys.	Net Each
HVC-1	.006	$ 9.00	**VIC-1**	.0085	$6.60	**VIC-13**	2.2	$ 7.20
HVC-2	.015	9.00	**VIC-2**	.013	6.60	**VIC-14**	3.4	7.20
HVC-3	.040	9.00	**VIC-3**	.021	6.60	**VIC-15**	5.4	7.50
HVC-4	.1	9.00	**VIC-4**	.034	6.60	**VIC-16**	8.5	7.50
HVC-5	.25	9.00	**VIC-5**	.053	6.60	**VIC-17**	13	7.50
HVC-6	.6	9.00	**VIC-6**	.084	6.60	**VIC-18**	21	7.80
HVC-7	1.5	9.60	**VIC-7**	.13	6.60	**VIC-19**	33	7.80
HVC-8	4.0	9.60	**VIC-8**	.21	6.90	**VIC-20**	52	8.40
HVC-9	10	9.60	**VIC-9**	.34	6.90	**VIC-21**	83	9.00
HVC-10	25	9.90	**VIC-10**	.54	6.90	**VIC-22**	130	12.00
HVC-11	60	10.80	**VIC-11**	.85	6.90			
HVC-12	150	12.00	**VIC-12**	1.3	7.20			

Replacement Transformers

COMMERCIAL GRADE COMPONENTS



Incorporate conservative design and rugged construction to assure dependability under continuous service. Cases finished in light gray enamel; intended for chassis mounting. All items are poured with special sealing compound plus vacuum impregnation of coil structures. All audio components are linear.

DIMENSIONS, COMMERCIAL GRADE CASE "RC"

Case No.	Base Dim. (Sq.)	Mounting Dim. (Sq.)	Ht., +⅛, −1/16	Cutout Dia.	Unit Wt. (Lbs.)
RC-50	1⅝	1 5/16	2¼	1½	½
RC-62	1 13/16	1½	2½	1½	1
RC-75	2 3/16	1 13/16	2⅞	1⅞	1½
RC-87	2 9/16	2 3/16	3¼	2	2½
RC-100	3	2⅜	3¾	2⅝	3½
RC-112	3 7/16	2 11/16	4⅛	2⅞	5
RC-125	3¾	3	4½	3	6½
RC-150	4½	3 9/16	5½	3¾	11
RC-152	5⅛	4⅛	5½	4	15½
RC-175	5¾	4⅞	7⅛	4	22

AUDIO UNITS

UTC Type	Use †	Pri. Imped., Ohms	Level	Case RC-	Net Each
CG-131	**a**	15K	+28 dbm	50	**$ 9.90**
CG-132	**b**	15K	+30 dbm	62	**9.90**
CG-133	**c**	30K CT	+32 dbm	75	**10.50**
CG-134	**d**	50, 200, 500	+30 dbm	50	**9.00**
CG-135	**e**	50, 200, 500	+30 dbm	50	**9.90**
CG-235	**f**	50, 200, 500	+28 dbm	75	**12.00**
CG-136	**g**	15K, 50, 200	+30 dbm	62	**13.20**
CG-137	**h**	50, 200, 500	+28 dbm	50	**8.40**
CG-140	**i**	15K	+30 dbm	50	**7.80**
CG-141	**j**	30K CT	+32 dbm	50	**9.00**
CG-233	**k**	30K CT	+35 dbm	87	**9.00**
CG-333	**k**	30K CT	+35 dbm	87	**9.00**
CG-433	**k**	5K CT	10 w.	100	**9.90**
CG-15	**l**	8K CT	20 w.	100	**12.00**
CG-16	**l**	3K/5K CT	20 w.	100	**12.00**
CG-19	**l**	6K/10K CT	20 w.	100	**12.00**
CG-710	**l**	14K/20K CT	20 w.	100	**12.00**
CG-2L6	**l**	9K CT	30 w.	125	**13.80**
CG-20	**m**	5K CT, 43% screen taps	25 w.	125	**15.00**
CG-21	**m**	3.3K CT, 40% screen taps	50 w.	150	**24.00**
CVP-1	**n**	3K/5K/6K/8K/10K/14K CT	12 w.	100	**13.20**
CVP-2	**n**	As above	30 w.	125	**14.40**
CVP-3	**n**	As above	60 w.	150	**21.00**
CVP-4	**n**	As above	125 w.	152	**24.00**
CVP-5	**n**	As above	300 w.	175	**39.00**
CVL-1	**p**	500	15 w.	87	**9.00**
CVL-2	**p**	500	40 w.	125	**10.50**
CVL-3	**p**	500	75 w.	150	**15.00**
CVM-0	**q**	Any Class B	12 w.	100	**10.50**
CVM-1	**q**	As above	30 w.	125	**13.80**
CVM-2	**q**	As above	60 w.	150	**18.00**
CVM-3	**q**	As above	125 w.	152	**21.00**
CVM-4	**q**	As above	300 w.	175	**39.00**
CVM-5	**q**	As above	600 w.	*	**105.00**
CG-51AX	**r**	15K	5 w.	87	**9.00**
CG-53AX	**r**	3K/10K CT	20 w.	112	**10.50**
CG-59AX	**r**	50, 200, 500	20 w.	112	**10.80**

*7″ x 12″ x 9″; Wt., 60 lbs. †**a**—Pl. to grid. **b**—Pl. to 2 grids. **c**—2 pl. to 2 grids. **d**—Input, humbucking. **e**—P-p input, humbucking. **f**—Input, mag. shielded. **g**—Dual input, humbucking. **h**—Mixing. **i**—Pl. to line. **j**—P-p to line. **k**—Driver. **l**—Output. **m**—Feedback output. **n**—Universal output. **p**—Universal matching. **q**—Universal modulator. **r**—Universal driver.

SWINGING INPUT AND FILTER CHOKES

UTC Type	Induct. Henries	DC MA	DC Res. Ohms	Test Volts	Case No.	Net Each
CG-40	10	200	110	1750	RC-112	**$ 8.10**
CG-44	30	100	400	1750	RC-100	**6.90**
CG-45	250	15	5000	1750	RC-87	**6.00**
CG-48C	75	50	2200	1750	RC-87	**7.50**
CG-100	12	150	110	2500	RC-125	**9.00**
CG-102	12	250	100	3000	RC-150	**13.20**
CG-104	10	350	90	5000	RC-152	**15.00**
CG-108	10	500	52	7000	RC-175	**27.00**
CG-1S	10	1000	40	9000	11½ x 4¾ x 6⅞ H. Wt.,40lbs.	**54.00**
CG-101	25/5	150	110	2500	RC-125	**9.00**
CG-103	25/5	250	100	3000	RC-150	**13.20**
CG-105	25/5	350	90	5000	RC-152	**15.00**
CG-109	25/5	500	52	7000	RC-175	**27.00**
CG-1C	25/5	1000	40	9000	11½ x 4¾ x 6⅞ H. Wt.,40lbs.	**54.00**

LINEAR STANDARD TRANSFORMERS

Closest approach to the ideal transformer in uniform frequency response, low distortion, dependability and high efficiency through shielding. Case is die cast. **Frequency Response:** Guaranteed ±1 db, 20-20,000 cps; ±1 db, 7-50,000 cps on high level units. Top and bottom mounting.

LOW LEVEL TRANSFORMERS

Type LS-1 case, 2⅝″ x 3⅛″ x 3¼″ h. Suffix **X** indicates mul alloy shield. Weight, 3 lbs.

UTC Type	Application	Pri. Imp., Ohms	Sec. Imp., Ohms	Level, dbm	E
LS-10	Input	50, 125/150, 200, 250, 333, 550/600	60K split	+19	$2
LS-10X	Input	As above	50K	+17	2
LS-12	Input	As above	120K split	+19	2
LS-12X	Input	As above	80K split	+17	2
LS-30	Mixing	As above	Same as pri.	+23	2
LS-30X	Mixing	As above	Same as pri.	+20	2
LS-21	Pl. to p-p	15K split	135K split	+20	1
LS-40	Pl. to p-p	15K, 8 ma	135K split	+20	3
LS-25	P-p to p-p	30K split	50K split	+23	2
LS-27	Pl. to line	15K, 8 ma	See LS-10 pri.	+23	2
LS-50	Pl. to line	15K	See LS-10 pri.	+23	2
LS-51	P-p to line	30K split	See LS-10 pri.	+24	2
LS-140	70 db hybrid	500/600 split	Same as pri.	+18	2
LS-141	Hybrid*	500/600 split	Same as pri.	+18	2

*Has 3 sets of coils.

HIGH LEVEL TRANSFORMERS

Type LS-2 case, 3½″ x 4 7/16″ x 4 3/16″ h. (wt., 7½ lbs.) except LS-65, 5″ x 5 13/16″ x 4 11/16″ h. (Wt., 15 lbs.).

UTC Type	Application	Pri. Imped., Ohms	†	Level Watts	Ne Eac
LS-33	Matching	50, 125/150, 200, 250, 333, 500/600	**a**	20	**$21**
LS-34	Matching	As above	**a**	40	**30**
LS-52	P-p output	8000 split	**b**	20	**24**
LS-55	P-p output	5K/3K split	**b**	20	**24**
LS-61	P-p output	10K/6K split	**b**	20	**24**
LS-54	P-p output	8000 split	**c**	20	**18**
LS-57	P-p output	5K/3K split	**c**	20	**18**
LS-63	P-p output	10K/6K split	**c**	20	**18**
LS-56	P-p output	5K/3K split	**d**	20	**24**
LS-35	EL-34's*	5K CT 43% taps	**e**	35	**24**
LS-65	6550's*	3.3K CT 40% taps	**e**	60	**42**

*With feedback. †Secondary Impedance: **a**—1, 2, 2.5, 5, 7. 15, 20, 30, 50, 125, 200, 250, 333, 500/600 ohms. **b**—500, 333 200, 125, 50, 30, 20, 10, 7.5, 5, 2.5, 1.2 ohms. **c**—30, 20, 1 7.5, 5, 2.5, 1.2 ohms. **d**—6K, 5K, 4K, 1.8K, 1.5K, 1K, 30, 2 10, 7.5, 5, 2.5, 1.2 ohms. **e**—4, 8, 16 ohms.

POWER AND BIAS TRANSFORMERS

Primary 115 volts, 50/60 cycles. DCMA is for choke input; r 70% for condenser input. Filament 1 is 5 volts, 3 amps. Filament 2 is 5 volts, 2 amps., except as otherwise noted.

UTC Type	High Voltage	DC Ma	Filament 3	Filament 4	Case No.
CG-422	435-365-0-365-435 125-0-125	125 25	6.3 VCT-3A	2.5 VCT-5A	RC-150
CG-428	500-0-500 80-0-80	250 100	6.3 VCT-4A	6.3 VCT-3A, tapped 2.5 VCT-3A	RC-152
CG-429*	600-525-0-525-600	250	7.5 VCT-3A, tapped 6.3 VCT-4A		RC-152
CG-431†	500-400-0-400-500 80-0-80	500 100	6.3 VCT-5A	6.3 VCT-3A	RC-175
CG-315	Tapped for any DC voltage from 15 to 100 volts within 6%—250 MA				RC-125
CG-316	Tapped for any DC voltage from 75 to 400 volts within 6%—250 MA				RC-152

*Filament 2 is 6.3 VCT-3A. †Filament 1 is 5V-6A.

VARIPOWER AUTOFORMERS

Designed for line voltage control, filament control and re power operation. Output voltage: 0-130 volts, 50/60 cps. P control of filament voltage at tube socket to ±2½% s taneously with line and plate voltage control Use to redu increase voltages on filament transformers. Taps at: 25, 55, 7 100, 105, 110, 115, 120, 125, and 130 volts.

UTC Type	Watts Output	Case	Net Each	UTC Type	Watts Output	Case No.
CVA-1	150	RC-112	**$12.00**	**CVA-4**	1000	RC-152
CVA-2	250	RC-125	**14.10**	**CVA-5**	2000	RC-175
CVA-3	500	RC-150	**18.00**			

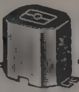
PLATE TRANSFORMERS

Primaries for 105, 115, 220, 230 volts; 50/60 cycles. For re power, secondary can be cut in half, using 220 v. primary o volts; may be used on 25 to 43 cycles in this case.

UTC Type	High Voltage	DC Volts	Case No.
CG-300	625-515-0-515-625	500/400	RC-150
CG-301	580-530-300-0-300-530-580	475/425/250	RC-152
CG-302	950-750-0-750-950	760/610	RC-175
CG-303	1500-1235-400-0-400-1235-1500	1250/1000 300	RC-175

Special Transformers

L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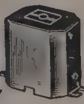
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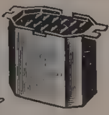
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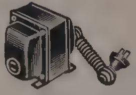


Fig. A

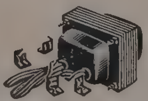


Fig. B

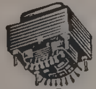


Fig. C

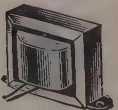


Fig. D

SPECIAL SERIES TRANSFORMERS

Special Series transformers are specifically designed for
ır and popular-priced P.A service. These units are finished in
commercial type medium gray enamel. A recessed terminal
provided, permitting above chassis or breadboard wiring in
n to standard chassis type.

INPUT AND DRIVER TRANSFORMERS

Application	Ratio Pri. to Sec.	Level	Case	Net Each
Plate to grid	1; 3½	+30 dbm	G-2	$4.80
Plate to p-p grids	1:4*	+30 dbm	G-2	6.00
Pl. to 1 or 2 grids	1:4*	+25 dbm	G-1	4.20
Line to grid, humbkg.	1:16	+30 dbm	G-2	4.80
Line to grid, compact	1:16	+25 dbm	G-1	4.50
Driver pl. to p-p	2.66:1, 5:1*	5 w.	G-3	6.60
Driver p-p to p-p	2.25:1, 3.6:1, 5:1*	20 w.	G-4	8.40
Driver p-p to p-p	2.25:1*	5 w.	G-3	6.60

r tapped.

MATCHING, OUTPUT AND MODULATION UNITS

Application	Pri. Imped., Ohms	†	Level, Watts	Case	Net Each
Pl. to line	15K	**a**	.25	G-2	$5.10
Line to V.C.	.5K/2K/4K	**b**	15	G-2	5.40
Line to V.C.	.5K/2K/4K	**b**	30	G-4	7.80
Output	2.5K 4K/7/K10K	**c**	10	G-2	6.60
PP output	4K/5K/10K CT	**c**	12	G-2	7.20
PP output	3K/6K/9/10KCT	**c**	30	G-4	8.40
PP output	3.8K/4.5-5K CT	**c**	55	G-5	9.90
Univ. modul.	Any Class B	**d**	12	G-3	7.20
Univ. modul.	Any Class B	**d**	30	G-4	9.30
Univ. modul.	Any Class B	**d**	55	G-5	15.00
Univ. modul.	Any Class B	**d**	110	G-7	21.00
Univ. modul.	Any Class B	**d**	250	G-9	33.00

dary Impedance: **a** 200 500 ohms. **b**—2, 4, 8, 15 ohms.
3, 15, 500 ohms. **d** Any Class C.

FILTER, SWINGING AND AUDIO CHOKES

	Henries	Ma. DC	Ohms	Insul.	Case	Net Each
‡	300	5	5000	1500 v.	G-2	$ 4.50
‡	500	3	6000	1500 v.	G-2	5.10
	30	30	800	1500 v.	G-2	3.90
	12	60	250	1500 v.	G-2	3.90
	25	75	350	1500 v.	G-4	5.10
	20	100	350	1500 v.	G-4	6.00
	6	175	90	1500 v.	G-4	5.10
†	4/20	175	90	1500 v.	G-4	5.10
	6	225	100	2700 v.	G-5	6.90
†	4/20	225	100	2700 v.	G-5	6.90
	8	300	100	4000 v.	G-7	9.30
†	4/20	300	100	4000 v.	G-7	9.60
	8	400	60	5000 v.	G-8	12.00
†	4/20	400	60	5000 v.	G-8	12.00
	8	550	60	6000 v.	G-8	15.00
†	4/20	550	60	6000 v.	G-8	15.00

o. ‡P.P. Audio C. T. †Swinging.

PLATE AND BIAS TRANSFORMERS

Primary 115 V. 50/60 Cycles

High Voltage	DC Voltages*	DC Ma	Case	Net Each
575-525-0-525-575	470/430	500	G-9	$24.00
900-750-0-750-900	750/620	200	G-8	21.00
1000-750-0-750-1000	825-/600	300	G-9	24.00
1500-1250-1000-0-1000-1250-1500	1275/1050/825	300	G-10	33.00
1500-1250-1000-0-1000-1250-1500	1300/1075/850	500	G-11	39.00
2100-1800-1500-0-1500-1800-2100	1815/1540/1275	300	G-11	36.00
3000-2500-0-2500-3000	2625/2175	300	G-12	60.00
Any bias voltage from 15 to 100 ±6%		200	G-5	12.00
Any bias voltage from 75 to 400 ±6%		200	G-7	15.60

d on two section filter for 200 ma. and 300 ma. units. Single
n filter for 500 ma. units, both choke input.

S SERIES CASE SIZE

Case	Height, In.	Width, In.	Depth, In.	Wt., Lbs.
G-1	1⅞	2¹¹⁄₁₆	1¾	1
G-2	2⁵⁄₁₆	3⅜	1¹⁵⁄₁₆	1½
G-3	2½	3¾	2³⁄₁₆	2
G-4	2¹⁵⁄₁₆	4⅛	2⁵⁄₁₆	3
G-5	3¾	3⅛	4½	4½
G-7	4⅜	4⅝	5½	8
G-8	4⅝	5⅜	5⅜	12
G-9	5⅞	5⅜	6¾	21
G-10	5⅞	6⅛	6⅝	24
G-11	5⅞	6½	7⅜	31
G-12	10¼	7⅜	9¼	52

FILAMENT TRANSFORMERS

UTC Type	Primary Tapped 105, 115 Volts. 50-60 Cy. Secondary Volts	Secondary Current	Insulation	Case No.	Net Each
S-53	2.5 VCT	10 Amp	1500 V	G-3	$ 6.00
S-54	5 VCT	4 Amp	2500 V	G-3	5.70
S-55	6.3 VCT	3 Amp	1500 V	G-3	5.40
S-57	2.5 VCT	10 Amp	10000 V	G-5	9.00
S-58	2.5 VCT	20 Amp	10000 V	G-5	9.60
S-59	5 to 5.25 VCT	13 Amp	5000 V	G-5	9.00
S-60	5 to 5.25 VCT	22 Amp	10000 V	G-7	13.20
S-61	7.5 VCT tapped 6.3 VCT	10 Amp	3000 V	G-5	10.20
S-62	10 VCT	10 Amp	3000 V	G-5	9.30
S-63	14 VCT tapped 12 VCT & 11 VCT	10 Amp	5000 V	G-7	13.20

Type	Filament 1	Filament 2	Filament 3	Case	Net
‡S-70	6.3 VCT-5A	6.3 VCT-5A	....	G-5	$10.20
*S-71	2.5 VCT-6A	2.5 VCT-6A	2.5 VCT-12A	G-7	15.00
†S-72	5 VCT-3A	5 VCT-3A	5 VCT-6A	G-5	10.80

*Insulation 10,000 v. †Insulation 5000 v. ‡Insulation 3000 v.

COMBINED PLATE AND FILAMENT TRANSFORMERS

UTC Type	Primary 115 V., 50-60 Cy. Voltage	DC V.	Rect. Fil.	Filament No. 1	Filament No. 2	Case No.	Net Each
S-39	490-400-0-400-490 175 ma	400/310	5 V-3A	2.5 VCT-6A	6.3 VCT-4A	G-7	$16.50
S-40	525-425-0-425-525 250 ma	400/310	5 V-3A	6.3 VCT-3A	6.3 VCT-3A	G-7	18.00
S-41	600-0-600 200 ma	475	5 V-3A	7.5 V tapped 6.3 V-3A	6.3 VCT-2A	G-7	18.00
S-42	600-525-0-525-600 300 ma	480/400	5 V-6A	7.5 V tapped 6.3 V-3A	6.3 VCT-3A	G-8	19.50

REPLACEMENT TYPE COMPONENTS

All units vacuum sealed. Shells and brackets finished in high lustre black enamel. A minimum number of transformers has been developed to cover any requirement in the replacement field.

STEP-DOWN AUTO-TRANSFORMERS (FIG. A)

With 6-ft. cord and female receptacle, except R-64; 220/240 to 110/120 v., 50/60 cps.

UTC Type	Rating	Size, Inches L.	W.	H.	Wt., Lbs.	Net Each
R-41	85 watt capacity	3³⁄₁₆	2⅝	3⅛	4	$5.70
R-42	125 watt capacity	3½	3	3½	5	6.00
R-43	175 watt capacity	3¾	3¼	3⅞	5½	6.90
R-44	250 watt capacity	4⅜	3¼	3⅞	6½	8.40
R-45	500 watt capacity	4⅝	3⅞	4⅜	12	12.00
R-46	1200 watt capacity	6⅞	3⅞	4⅝	18	24.00
R-64	2500 watts, no cord	10½	4¾	6¾	30	45.00

DOUBLE SHELL POWER TRANSFORMERS (FIG. B)

Rectifier filaments 5 volts, 3 amps except R-101, 2 amps.

UTC Type	High V.	DC Ma.	Amplifier Filament	Overall Height	Wt., Lbs.	Net Each
R-101	275-0-275	50	6.3 v. CT-2.7A	3"	2½	$6.30
R-102	350-0-350	70	6.3 v. CT-3A	3⅝"	3½	7.20
R-103	350-0-350	90	6.3 v. CT-3.5A	3¹⁵⁄₁₆"	4½	7.80
R-104	350-0-350	120	6.3 v. CT-5A	3⅞"	5½	9.00
R-105	385-0-385	160	6.3 v. CT-5A	4¹⁵⁄₁₆"	7	11.40

SINGLE SHELL POWER TRANSFORMERS (FIG. C)

Rectifier filaments 5 volts, 3 amps., except R-106, 2 amps.

R-106	300-0-300	50	6.3 v. CT-2.7A	3¼"	2½	$6.60
R-107	350-0-350	70	6.3 v. CT-3A	3⅞"	3½	7.20

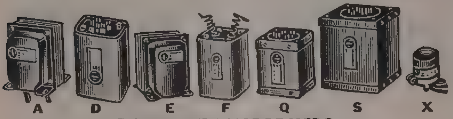
VERTICAL SHELL POWER TRANSFORMERS (FIG. D)

Rectifier filaments 5 volts, 3 amps., except R-110, 2 amps.

R-110	300-0-300	50	6.3 v. CT-2.7A	3¼"	2½	$6.60
R-111	350-0-350	70	6.3 v. CT-3A	3¼"	3½	7.20
R-112	350-0-350	120	6.3 v. CT-5A	4"	5½	9.00
R-113	400-0-400	200	6.3 v. CT-6A	4⅝"	8	13.20

Audio Transformers, Accessories

ALTEC-LANSING "PEERLESS" AUDIO TRANSFORMERS



POWER TRANSFORMERS

COMBINATION PLATE AND FILAMENT

Primary 117 v., 60 cps. Supplied with electro-static shield.

Peerless No.	High-Voltage Secondary		Amps. at 6.3 v. CT	Size, In. H. x D. x W.	Net Each
	AC Volts	DC Ma			
R-340-F	325-0-325	100	5	4⅜ x 3 1/16 x 2¾	$20.25
R-490-F	350-0-350	200	6	5 5/16 x 3 15/16 x 3⅜	24.00
R-562-F	400-0-400	220	6	5 5/16 x 3 15/16 x 3⅜	27.00
R-631-F	500-435-0-435-500*	225	6	6 x 4¾ x 4 1/16	37.50
R-800-A	400-0-400	300	4-5	4¾ x 5⅛ x 3 15/16	24.00
R-815-S	550-275-0-275-550	†	4-4.2-.9	6⅜ x 5⅛ x 5⅛	60.00

*Has 100 v. tap for C bias. †280 from 550-0-550; 40 from 275-0-275.

FILAMENT TRANSFORMERS

May be used back-to-back with any plate and filament transformer to furnish isolated AC up to 115 v. Primary, 117 v., 60 cps.

Peerless No.	Sec. Amps at 6.3 v. CT	Test Volts RMS	Size, In. H. x D. x W.	Wt., Lbs.	Net Each
F-012-X	1	2000	1⅝ x 2⅞ x 1⅝	½	$ 4.50
F-139-E	8	2000	3½ x 3⅛ x 2⅞	3¼	12.30

SMOOTHING CHOKES

Inductance, 10 hys.

Peerless No.	Cur. DC Ma	Resis., Ohms	Test Volts RMS	Size, In. H. x D. x W.	Net Each
C-325-F	120	240	1500	3⅞ x 2 13/16 x 2 7/16	$11.25
C-390-F	200	150	1500	4 15/16 x 3 9/16 x 3 3/16	15.00

INPUT TRANSFORMERS

Maximum operating level and low insertion loss. Gray enamel case. **No. K-241-D:** "20-20 Plus" transformer with guaranteed ±1 db, 10-25,000 cps frequency response; 90 db electromagnetic shielding; high power rating suitable for use as output transformer; primary balanced to attenuate longitudinal currents in excess of 50 db. **No. K-308-D:** Used for line, mixer or mike to single grid; frequency response, ±1 db, 30-20,000 cps when terminated; 60 db magnetic shielding.

Peerless No.	Max. Level dbm‡	Impedance Ohms		Size, In. H. x D. x W.	Wt., Lbs.	Net Each
		Pri.	Sec.			
K-241-D	+8	500-280-125-31*	70K†	2¾ x 1½ x 2	1	$30.00
K-308-D	0	250 CT	50K	1½ x 1 1/16 dia.	¼	12.30

*Or 600-340-150-37.5. †Or 84K; total of 2 separate windings.
‡Reference 1 mw.

OUTPUT TRANSFORMERS

STANDARD OUTPUT TRANSFORMERS

Frequency response, ±1 db, 20-30,000 cps except (*), 20-20,0 cps. No. S-448-Q for single or PP plates to line; 30 db humbucki All others for PP plates to speaker.

Peerless No.	Imped., Ohms		Max. Pri. DC Ma	Audio Watts	Wt., Lbs.	Net Each
	Primary	Secondary				
S-448-Q*	20K CT 12.5K CT 5,000-3125	500 CT 200 CT-333 250-125-50	15	+18 dbm†	1¾	$19.2
S-510-F	10K CT 8K CT	16-8	40	10	2	16.5
S-526-F	6.6K CT 5K CT	16-8-4	60	20	3¾	21.0
S-542-F	5K CT 4K CT	16-8-4	140	40	6	26.2

†Applies to 20-20,000 cps range.

"20-20 PLUS" HIGH LEVEL OUTPUTS

All "20-20 Plus" series have guaranteed frequency response.

Peerless No.	Freq. Res. Cps. @ ±1 db	Imped., Ohms		Max. Level‡	Pri. DC Ma†	Wt., Lbs.	Ne Eac
		Pri.	Sec.				
S-217-D*	5-65,000	12.5K, 3125	600-300 150-75	+20 dbm	25	1¼	$38.
S-232-Q	10-100,000	6600 CT 1650 CT	16, 8, 4, 1	+43 dbm 20 watts	70 140	3¼	31.
S-238-Q	10-75,000	10K CT 2500 CT	16, 8, 4, 1	+43 dbm 20 watts	50 100	3¼	31.
S-258-Q	10-100,000	5000 CT 1250 CT	16, 8, 4, 1	+46 dbm 40 watts	120 240	6½	42.
S-271-S	10-100,000	5000 CT 1250 CT	16, 8, 4, 1	+49 dbm 80 watts	200 400	18	54.
S-273-S	10-80,000	8000 CT 2000 CT	16, 8, 4, 1	+49 dbm 80 watts	125 250	18	54.

*May be used as input transformer or bridging; has CT terti winding for feedback or ground for electrostatic shielding.
‡Applies to 20-20,000 cps range. †Maximum.

IMPEDANCE MATCHING TRANSFORMERS

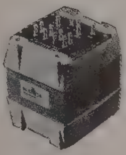
Standard units meet most requirements. High level "20-20 Pl series for matching amplifiers and speakers up to 70 volts acr entire winding; No. E-372-Q is not "20-20 Plus".

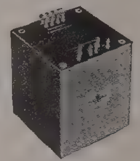
Peerless No.	Freq. Res. Cps. @ ±1 db	Imped., Ohms		Max. Level*	Pri. DC Ma§	Wt., Lbs.	Ne Ea
		Pri.	Sec.				
E-372-Q	20-20,000	500 CT-333 250-200 CT 125-50	Same as Pri.	+18 dbm	....	1½	$22.
E-204-D†	5-80,000	500 CT 125 CT or 600 CT 150 CT	Same as Pri.	+23 dbm	100	1¼	40.
A-262-E‡	10-100,000	16, 8, 4 or 8, 4, 2		48.7 dbm 44.7 dbm	....	5¾	18.

*Applies to 20-20,000 cps range. §Maximum. †Also makes ex lent hybrid transformer. ‡Autotransformer may be used in a combination of rated impedances.

PARTRIDGE AUDIO TRANSFORMERS

Two series of push-pull output transformers for fine fidelity performance. A product of superb British engineering, these transformers provide full range frequency response with a minimum of distortion at full rated outputs. Clean design with silver-gray hammertone finish. Compact for limited space conditions.


P5000


P6000

SERIES P5000 OUTPUT TRANSFORMERS

Models P5201 thru P5204: Power rated 20 watts at 30 cps with less than 1% distortion; 35 watts at 50 cps with less than 1% distortion. Four section secondary may be connected in series or parallel for 0.95, 3.8, 8.5 and 15 ohms speaker impedances. Frequency Response (5-7K ohm model): Transformer working in resistive circuit of 3.5K ohms source and 6.6K ohms referred load; flat within ±½ db, 20-30,000 cps. Size: 3⅜" x 3 13/16" x 4 1/16" h. Weight, 6.5 lbs. **Models P5351 thru P5354:** Same as above but rated 35 watts at 30 cps with less than 1% distortion; 50 watts at 50 cps with less than 1% distortion. Size: 3⅜" x 3 13/16" x 4 9/16" h. Weight, 7.8 lbs.

Partridge Number	Plate-Plate Load, Ohms	U.L. Tap	DC Resis. Ohms*	Current Rating Ma†	Audio Net Each
P5201	9-12K	43%	100	80	$25.00
P5202	7-9K	43%	100	80	25.00
P5203	5-7K	43%	100	80	25.00
P5204	3-5K	20%	100	80	25.00
P5351	9-12K	43%	122	80	30.00
P5352	7-9K	43%	122	80	30.00
P5353	5-7K	43%	122	80	30.00
P5354	3-5K	20%	122	80	30.00

*Of each half of primary. †Of primary winding.

SERIES P6000 OUTPUT TRANSFORMERS

Same as P5000 Series except rated 60 watts at 25 cps with l than 1% harmonic distortion; 100 watts at 35 cps with less t 1% harmonic distortion. Size: 4⅝" x 4⅝" x 4⅞" h. Weig 14 lbs.

Partridge Number	Plate-Plate Load, Ohms	U.L. Tap	DC Resis. Ohms*	Current Rating Ma†	Aud Net Eac
P6001	6-8K	43%	86	175	$49.
P6002	4-5K	20%	86	175	49.
P6003	3-4K	20%	86	175	49.
P6004	2-3K	20%	86	175	49.

*Of each half of primary. †Of primary winding.

NATIONAL COMPONENTS

Type FWH—Insulators molded of mica-filled bakelite. Bind posts take banana plugs at top, grip wires at bottom; holds bot once. Panel, ¾" x 1½". Post holes, 7/64" dia. Overall ht., 1 19/32". Shipped unassembled. Net Each $1

Type FWJ—Same as Type FWH, but with jacks. When used w Type FWT, no metal is exposed. Overall, 1½" l. x ⅞" h. x ¾" w. Net Each 8

Type FWT—Molded mica-filled bakelite plug with two ban plugs on ¾" centers. For FWH and FWJ. Holes take wires up to #10 ga. Overall ht., 1 59/64". Net Each $1

Type FWA—Nickel-plated brass binding post with 8-32 sc and nut, washer, and lug. Holds wire up to #10 ga. Overall ht., 1 25/32". Net Each 4

Type FWE—Nickel-plated brass jack with lug and ⅜" nut. Overall, 11/64" dia., ⅞" lg. Net Each 1

Type FWC—Heavy duty, molded mica-filled bakelite insula Two ¼" holes on ¾" centers. Overall: ¾" w. x 1½" lg. Net Pair 6

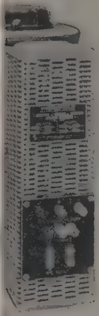
Type XS-6—Low-loss steatite bushing to fit ½" holes. Passes 6-32 screw. Net Each 1

Type SPP-3 Cap—Ceramic grid and plate cap. Protects aga accidental contact with high voltage caps on tubes. Fits ⅜" diameter. Net Each 2

Type SPP-9 Cap—Ceramic cap for 9/16" dia. Net Each 2

Superior Electric Components

ELL® ADJUSTABLE AC/DC POWER SUPPLY

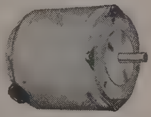


Compact low cost unit designed to provide a source of adjustable low AC or DC voltages from AC power lines. Can be used independently or as an apparatus component. Consists of 3-phase, low voltage "Powerstat" variable transformer combined with static DC power supply. Uses highly efficient silicon rectifier cells connected for full-wave 3-phase operation. Seldom requires filtering. Low ripple content, approximately 4.2%; ripple frequency, 360 cps at a supply frequency of 60 cps. Exposed terminal board has separate set of terminals for AC/DC input and output connections. Operates on AC input of 240 v., 50/60 cps, 3-phase (primary delta connected); AC output, 0-30 v., 40 a., 3-phase (secondary delta connected), or 0-50 v., 25 a., 3-phase connected (secondary wye connected); DC output, 0-35 v., 50 a. (secondary delta connected), or 0-60 v., 30 a. (secondary wye connected). Full current rating can be obtained at any voltage setting. AC/DC outputs cannot be simultaneously loaded or externally interconnected. AC output permits single or three-phase use. AC/DC regulation ap-
ely 10% at maximum voltage setting. **Size:** 8¾" w. x
x 19¼" h.

Type V4050-3 Varicell® AC/DC Power
-Net Each............................ $415⁰⁰

WRITE FOR BULLETIN V359.

SLO-SYN® SYNCHRONOUS MOTORS



permanent magnet type syn-
AC motor adaptable for wide
f control applications. At 60 cps,
nains constant at 72 rpm without
iction. Torque rated at 150 ounce-
Single-pole, three-position switch
instant starting, stopping, and
control since motor has three
ly. When used as stepping or
" motor, DC impulses are con-
to either 200 or 400 precise increments of one revolution
iotor shaft. Rated torque maintained for any stepping
each step is made instantly, without slip or clatter. **Input:**
)/70 cps, 1-phase. **Output Speed:** 72 rpm, 60 cps. **Dimen-**
¼" dia. x 4¾" d. Weight, 6½ lbs. Models having inte-
ounted resistor and capacitor and speed reducing plane-
mblies also available.

WITHOUT PHASE SHIFTING COMPONENTS

No.	Speed	Torque	Net Each
	72 rpm, .833 sec/rev	150	$45.00
2	3.323 rpm, 18.06 sec/rev	2500	55.00
3	0.665 rpm, 90.28 sec/rev	2500	65.00
4	0.133 rpm, 451.39 sec/rev	2500	75.00
5	0.027 rpm, 2256.9 sec/rev	2500	85.00

WITH INTEGRAL RESISTOR AND CAPACITOR

C	72 rpm, .833 sec/rev	150	$54.00
2-RC	3.323 rpm, 18.06 sec/rev	2500	64.00
3-RC	0.665 rpm, 90.28 sec/rev	2500	74.00
4-RC	0.133 rpm, 451.39 sec/rev	2500	84.00
5-RC	0.027 rpm, 2256.9 sec/rev	2500	94.00
13	250 ohm, 25 watt resistor	......	1.00
-G2	3.3 µf, 330 v. AC capacitor	......	2.50

WRITE FOR BULLETIN SS459.

DUB-L-PLUG DUAL CONNECTORS

Multi-purpose Dub-L-Plug dual connectors provide quick, safe connections to binding posts mounted on ¾ in. centers. Feature gold-plated metal conducting parts, color-coded captive thumbnuts, protectively recessed twin banana plugs. **Shielded/Insulated:** Die-cast chrome-plated metal case and internal grounding banana plug, can be removed for use on 2-wire ungrounded circuits or with 2-conductor shielded cable. Shielded cable can be grounded to case with nylon cord-
screw. **Insulated/Unshielded:** Nylon plastic bodies, avail-
ed, white, blue, black, yellow or green. Provision for wiring
on by stud hole clamping, looping and clamping, or by
g, clip-lead or banana plug. Wiring slots permit stacking.

Type SPGK2BC—Shielded/Insulated; black
ug. Net Each.................................. $4⁵⁰

Type IPG2RC—Insulated; red. Net Each...... $2.50

Type IPG2WTC—Insulated; white. Net Each.. 2.50

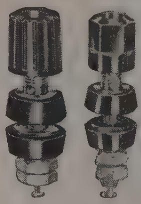
Type IPG2BLC—Insulated; blue. Net Each.... 2.50

Type IPG2YC—Insulated; yellow. Net Each... 2.50

Type IPG2GNC—Insulated; green. Net Each... 2.50

Type IPG2BC—Insulated; black. Net Each.... 2.50

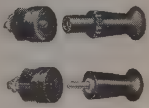
FIVE-WAY BINDING POSTS



Gold-plated, 5-way nylon plastic binding post connectors. Available in six colors: Red, white, blue, yellow, green, black. All current-carrying metal parts gold-plated for long life, resistance to corrosion, stable electrical contact, and faster soldering. Five different methods of connection provide flexibility: Permit connection by (1) standard ¾ in. banana plug; (2) clip-lead to the shaft; (3) wire looped around the shaft and clamped; (4) wire permanently clamped through the center hole; (5) clamped spade lug connection. Can be mounted and securely locked in any panel from 1/16" to ¼" thick; adapter spacers available for thinner panels. Current capacity, 30 amps; 1000 volt working voltage. Also available with nickel-plated metal parts on special order. Hexagonal or fluted type thumbnut.

Color	Metal Finish	Hexagon No.	Net Each	Fluted No.	Net Each
Black	Gold-Plated	DF30BC	40c	DF31BC	41c
Blue	Gold-Plated	DF30BLC	40c	DF31BLC	41c
Red	Gold-Plated	DF30RC	40c	DF31RC	41c
Green	Gold-Plated	DF30GNC	40c	DF31GNC	41c
White	Gold-Plated	DF30WTC	40c	DF31WTC	41c
Yellow	Gold-Plated	DF30YC	40c	DF31YC	41c

SUPERCON ELECTRICAL CONNECTORS



These socket and pin types of plugs and receptacles incorporate many new features. Wiring connections can be soldered or solderless. Two cable fastening screws permit accommodation of a wide range of cable sizes for many needs. Current-carrying parts are of gold-plated brass for stable electrical contact and resistance to corrosion. Molded plastic parts offer high dielectric strength, durability, color stability, self-locking action, resistance to heat and corrosion. Socket plug grips of two-piece threaded construction for quick assembly. Pin plugs assembled by single nut after cable connection. Receptacles have color-matching caps and bodies for circuit identification in front and back of panel. Plug and receptacles available in red, white, blue, yellow, black or green (see footnote below). Available in 50 and 100 amp ratings.

SOCKET RECEPTACLES			SOCKET PLUGS		
Seco No.*	Amp	Net Each	Seco No.*	Amp	Net Each
RS50GB	50	$2.50	PS50GB	50	$2.00
RS50GY	50	2.50	PS50GY	50	2.00
RS50GR	50	2.50	PS50GR	50	2.00
RS50GBL	50	2.50	PS50GBL	50	2.00
RS50GGN	50	2.50	PS50GGN	50	2.00
RS50GWT	50	2.50	PS50GWT	50	2.00
RS100GB	100	3.00	PS100GB	100	2.50
RS100GY	100	3.00	PS100GY	100	2.50
RS100GR	100	3.00	PS100GR	100	2.50
RS100GBL	100	3.00	PS100GBL	100	2.50
RS100GGN	100	3.00	PS100GGN	100	2.50
RS100GWT	100	3.00	PS100GWT	100	2.50
PIN RECEPTACLES			**PIN PLUGS**		
RP50GB	50	$2.50	PP50GB	50	$2.00
RP50GY	50	2.50	PP50GY	50	2.00
RP50GR	50	2.50	PP50GR	50	2.00
RP50GBL	50	2.50	PP50GBL	50	2.00
RP50GGN	50	2.50	PP50GGN	50	2.00
RP50GWT	50	2.50	PP50GWT	50	2.00
RP100GB	100	3.00	PP100GB	100	2.50
RP100GY	100	3.00	PP100GY	100	2.50
RP100GR	100	3.00	PP100GR	100	2.50
RP100GBL	100	3.00	PP100GBL	100	2.50
RP100GGN	100	3.00	PP100GGN	100	2.50
RP100GWT	100	3.00	PP100GWT	100	2.50

*Final suffix in model number indicates color (e.g., RS50GB is black): B, Black; Y, Yellow; R, Red; BL, Blue; GN, Green; WT, White.

FLEXIFORMER PACKAGED TRANSFORMER PRIMARY

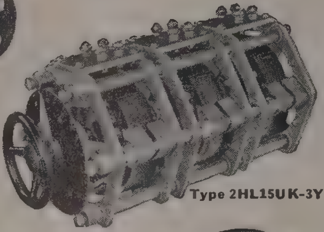
Flexiformer "do it yourself" transformer is a self-contained toroidal primary coil consisting of a strip-wound silicon steel core having a coil of 400 turns of #24 B&S gauge copper wire. Complete with Superior Five-Way Binding Posts for connections. Binding posts are colored for relative polarity identification. When used as a current transformer the Flexiformer winding becomes the secondary winding with the current induced by a wire passing through the center opening. If used with a 0-1 amp ammeter, up to 400 amps can be measured to 1% at 60 cps. When used as a source of AC voltage, the center opening permits hand threading the proper number of secondary winding turns to obtain the desired output voltage. Flexiformer can be used for testing the current-carrying capacity of contacts, connectors, relays, circuit breakers, fuses and similar applications. Can be used as a portable unit or fastened permanently in place. Complete with a reference chart giving easy-to-follow winding information to obtain the most frequently used ratings. Input rating of 120 v., 50-60 cps single phase and output rating of 150 VA. **Size:** 6" w. x 2⅝" d. x 5¾" h.

Superior Type P150 Flexiformer—
Net Each.. $22⁰⁰

WRITE FOR BULLETIN TP659.

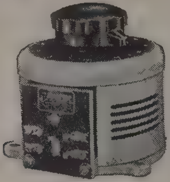
Superior Electric Powerstats®

Type 3HS04UK



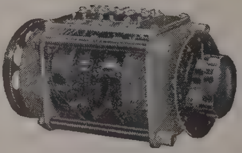
Type 2HL15UK-3Y

Type 1HMS07UK



Type 1HMD07CK

Type 1RHS03UK



Type 2HMS07UK-3Y

400/800 CYCLE SINGLE AND 3-PHASE STANDARD POWERSTAT® VARIABLE TRANSFORMERS

"Powerstat" variable transformers are now available in several standard series for high frequency aircraft, marine, missile and industrial applications. Single and three phase, 400/800 cycle, manual and motor-driven air-cooled models are offered for 28, 120, 240, and 480 volt service in ratings from 56 VA to 8.7 KVA. Of rugged, compact construction, assemblies perform same task as conventional 60 cycle units, but weigh only ⅙ as much and occupy only ½ the cubic space. Engineered to operate in −55° to +40° C ambient at full rated load (reducing to +80° C); altitudes to 50,000 feet; up to 95% relative humidity; vibration, shock and inclination per MIL-T-17113; corrosion resistance per QQM-151-A and other applicable military specifications. All manual units are knob operated but screwdriver slot method of turning may be ordered for types HS and HMS single phase units. All types HL and HMS units are available as motorized assemblies. Motor-driven types are available with either a 28 v. DC or a 120 v., 400 cycle AC motor with a standard speed of 60 seconds for full range travel.

FOR 28, 120 AND 240-VOLT SINGLE PHASE

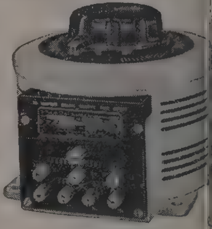
Superior Number	Line Volts	Output			Approx. Shpg. Wt., Lbs.	Price Each
		Volts	Max. Amps.	Max. KVA		
3HS02UK	28	0 28	2.0	.056	0.9	$ **20.00**
3HS02CK*	28	0–28	2.0	.056	0.9	**22.00**
3HS04UK	28	0–28	4.0	.112	1.2	**22.00**
3HS04CK*	28	0–28	4.0	.112	1.2	**24.00**
1HS01UK	120	#0–140	1.0	.14	1.3	**14.50**
1HS01CK*	120	#0–140	1.0	.14	1.4	**20.00**
1RHS03UK	120	0–28	2.6	.073	1.0	**34.00**
1HMS03UK	120	#0–140	3.0	.42	2.8	**15.50**
1HMS07UK	120	#0–140	7.5	1.0	3.8	**20.00**
1HMD07UK	120	#0–140	7.5	1.0	4.2	**20.00**
1HMD07CK*	120	#0–140	7.5	1.0	4.7	**22.00**
1HL15UK	120	#0–140	15.0	2.1	14.0	**50.00**
2HMS03UK	240	#0–280	3.0	.84	3.8	**22.50**
2HMD03UK	240	#0–280	3.0	.84	4.2	**22.50**
2HMD03CK*	240	#0–280	3.0	.84	4.7	**24.50**
2HL09UK	240	#0–280	9.0	2.5	15.4	**50.00**

FOR 240- AND 480-VOLT THREE-PHASE

Superior Number	Line Volts	Volts	Max. Amps.	Max. KVA	Approx. Shpg. Wt., Lbs.	Price Each
2HMS03UK-3Y	240	#0–280	3.0	1.5	8.5	$ **49.50**
2HMS07UK-3Y	240	#0–280	7.5	3.6	11.6	**67.00**
2HL15UK-3Y	240	#0–280	15.0	7.3	41.0	**140.00**
4HMS03UK-3Y	480	#0–560	3.0	2.9	11.6	**74.50**
4HL09UK-3Y	480	#0–560	9.0	8.7	45.5	**140.00**

*Enclosed construction. All others are open construction. #Supplied with terminals for limiting maximum output voltage to line voltage, if desired.

DOUBLE WOUND POWERSTAT® VARIABLE TRANS FORMER WITH ISOLATED SECONDARY



Type LW136

POWERSTAT type LW136 is a double wound assembly with an isolated secondary. Any single unit can be connected for either 120 volt or 240 volt, 50/60 cycle input and can be used as a source of 0-30 volts isolated output; either a 120 volt or 240 volt line corrector; or either a 120 or 240 volt limited range "buck-boost" variable transformer. Any three phase, three gang unit can be connected for either 240 or 480 volt, 60 cycle input and can be used as a source of 0-60 volts isolated output; either a 240 or 480 volt line corrector; or either a 240 or 480 volt limited range "buck-boost" variable transformer. Gray enamel finish for either panel or general utility mounting. When ordering (*) mo driven assemblies prefix type number with desired speed of ei 5, 15, 30 or 60 seconds for full range travel and letters MB. of the ratings given below are possible simply by using the pro terminal connections. These are only a few of the many rati that can be obtained. Data sheet on request.

FOR 50/60 CYCLE SINGLE PHASE

Seco No.	Line Volts	Output			Price Each	
		Volts	Max. Amps.	Max. KVA	Manual	Moto Drive
LW136	120	0 30	25	.75	**$80.00**	**$205**
	120	15–0 15	35	.52		
	240	0–30	25	.75		
	240	15–0–15	35	.52		
	120	105–135	35	4.7		
	107–137	120	35	4.2		
	240	225–255	35	8.9		
	226–256	240	35	8.4		

FOR 60 CYCLE THREE-PHASE

Seco No.	Line Volts	Volts	Max. Amps.	Max. KVA	Manual	Moto Drive
LW136-3	240	210–270	35	16.4	**$260.00**	**$385**
	214–260	240	35	14.6		
	480	450–510	35	31.0		
	452–512	480	35	29.1		

EN TYPE POWERSTATS®

Type EN116

Wide application and mounting flexibility. Housed in lightweight, functional aluminum enclosures that permit easy installation, wiring and servicing. Single units and ganged assemblies available for 120, 240 and 480 volt, single and three phase service with loads up to 5.2 KVA. Data sheet on request. Single units below size 5¾" w. x 6" d. x 6¹³⁄₁₆" h. Shipping Weight, 15 lbs.

FOR SINGLE PHASE SERVICE

Seco Type	Input		Output			Price Eac
	Volts	Freq.	Volts	Amps.	KVA	
EN116	120	50/60	0-140	6.5	.91	**$25.0**
EN117	120	60	0-120	8.5*	1.5*	**25.5**
EN216	240	50/60	0-280	2.6	.73	**27.0**
EN217	240	60	0-240	3.5*	1.3*	**28.0**

*Current is maximum for constant-current load; KVA is maxi for constant-impedance load.

VOLTBOX® AC POWER SUPPLY

UC1M

Handy instrument for laboratory, inspection department and the plant that eliminates nuisance of collecting variable AC voltage testing elements. Included in gray cast aluminum case are a **"Powerstat"**, direct reading voltmeter, 3 output receptacles, 2 Superior 5-way binding posts, "on-off" switch, line-load meter switch, renewable fuse and a six foot cord and plug.

Type UC1M —Input: 120 volts, 50/60 cycles, single phas Output: 0-140 volts, 7.5 amps., 1000 VA. Weight, 13 lbs. Price Each **$6**

Type UC2M—Input: 240 volt, 50/60 cycles, single phas Output: 0-280 volts, 3.0 amps., 840 VA. Weight, 13 lbs. Price Each **$7**

Superior Electric Powerstats®

ARD POWERSTAT® VARIABLE TRANSFORMERS

RSTAT® Variable Transformers are auto-transformers of
core design, with a movable brush-tap which rotates to
a continuously-adjustable output voltage from AC power
to each "Powerstat" are incorporated superior qualities of
trical performance, rugged mechanical construction, com-
sign and durability. "Powerstats" feature zero waveform
on, excellent regulation, conservative ratings, standard
ngs, smooth control and high efficiency. Manual and motor-
ypes available in ratings from 132 VA to 217 KVA. Com-
e of standard explosion-proof and oil-cooled models offered
erous capacities. For complete technical data request
stat" Catalog P258G.

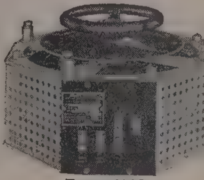
SINGLE PHASE

	Line Volt.	Freq.	Output			Price Each	
			Volt.	Max. Amp.	Max. KVA.	Manual	Motor* Driven
	120	**60	#0-132	1.75	.23	$ 8.50	....
	120	**60	#0-140	3.0	.42	12.50	....
	120	50/60	#0-140	7.5	1.0	18.00	....
	120	50/60	#0-140	7.5	1.0	24.00	....
	120	50/60	0-140	7.5	1.0	30.00	....
	120	50/60	0-140	7.5	1.0	30.00	....
	120	50/60	0-140	7.5	1.0	27 50	....
	120	50/60	#0-140	12.5	1.8	31.00	....
	120	50/60	#0-140	12.5	1.8	35.00	....
	120	50/60	#0-140	12.5	1.8	44.00	....
	120	50/60	#0-140	20.0	2.8	50.00	$175.00
	120	50/60	#0-140	20.0	2.8	65.00	....
	120	50/60	#0-140	40.0	5.6	117.00	242.00
	120	50/60	0-140	45.0	6.3	118.00	243.00
P	120	50/60	0-140	90.0	12.6	269.00	394.00
P	120	50/60	0-140	135.0	18.9	418.00	543.00
P	120	50/60	0-140	180.0	25.2	613.00	738.00‡
P	120	50/60	0-140	270.0	37.8	1015.00	1140.00‡
	240	**60	#0-264	1.75	.46	25.00	....
	†240	50/60	#0-280	3.0	.84	20.00	....
	†240	50/60	#0-280	3.0	.84	26.00	....
	240	50/60	0-280	3.0	.84	33.00	....
	240	50/60	0-280	3.0	.84	33.00	....
	240	50/60	0-280	3.0	.84	30.00	....
	†240	50/60	#0-280	6.0	1.7	31.00	....
	†240	50/60	#0-280	6.0	1.7	35.00	....
	†240	50/60	#0-280	6.0	1.7	44.00	....
	240	50/60	#0-280	7.5	2.1	44.50	....
	240	50/60	#0-280	7.5	2.1	54.00	....
	†240	50/60	#0-280	9.0	2.5	50.00	175.00
	†240	50/60	#0-280	9.0	2.5	65.00	....
	240	50/60	#0-280	12.5	3.5	72.00	....
	240	50/60	#0-280	12.5	3.5	80.00	....
	240	50/60	#0-280	20.0	5.6	117.00	242.00
	†240	50/60	0-280	28.0	7.8	118.00	243.00
S	240	50/60	0-280	45.0	12.6	261.00	386.00
P	†240	50/60	0-280	56.0	15.7	269.00	394.00
P	†240	50/60	0-280	84.0	23.5	418.00	543.00
S	240	50/60	0-280	90.0	25.2	597.00	722.00‡
P	†240	50/60	0-280	112.0	31.4	613.00	738.00‡
S	240	50/60	0-280	135.0	37.8	999.00	1124.00‡
P	240	50/60	0-280	168.0	47.0	1015.00	1140.00‡
	†480	50/60	#0-560	3.0	1.7	49.00	....
	†480	50/60	#0-560	3.0	1.7	58.00	....
	†480	50/60	#0-560	6.0	3.4	72.00	....
	†480	50/60	#0-560	6.0	3.4	80.00	....
	†480	50/60	#0-560	9.0	5.0	117.00	242.00
S	†480	50/60	0-560	28.0	15.7	261.00	386.00
S	†480	50/60	0-560	56.0	31.4	597.00	722.00‡
S	†480	50/60	0-560	84.0	47.0	999.00	1124.00‡

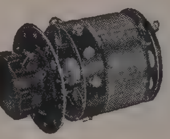
THREE PHASE

	120	**60	#0-132	1.75	.40	$ 25.00	....
	120	**60	#0-140	3.0	.73	37.00	....
	120	50/60	#0-140	7.5	1.8	44.50	....
	120	50/60	#0-140	7.5	1.8	54.00	....
	120	50/60	#0-140	12.5	3.0	72.00	....
	120	50/60	#0-140	12.5	3.0	80.00	....
	120	50/60	#0-140	20.0	4.8	117.00	$242.00
D	120	50/60	0-140	45.0	10.9	261.00	386.00
D	120	50/60	0-140	90.0	21.8	597.00	722.00‡
D	120	50/60	0-140	135.0	32.7	1015.00	1140.00‡
	240	60	0-240	1.75	.73	40.00	....
	240	60	0-240	3.0	1.2	59.50	....
	†240	50/60	#0-280	3.0	1.5	49.00	....
	†240	50/60	#0-280	3.0	1.5	58.00	....
	†240	50/60	#0-280	6.0	2.9	72.00	....
	†240	50/60	#0-280	6.0	2.9	80.00	....
	240	**60	#0-280	7.5	3.6	61.50	....
	240	**60	#0-280	7.5	3.6	77.00	....
	†240	50/60	#0-280	9.0	4.4	117.00	242.00
	240	**60	#0-280	12.5	6.1	105.00	....
	240	**60	#0-280	12.5	6.1	117.00	....
	240	**60	#0-280	20.0	9.7	170.00	295.00
D	†240	50/60	0-280	28.0	13.6	261.00	386.00
Y	240	**60	0-280	45.0	21.8	394.00	519.00
D	†240	50/60	0-280	56.0	27.2	597.00	722.00‡
D	†240	50/60	0-280	84.0	40.7	1015.00	1140.00‡
Y	240	**60	0-280	90.0	43.6	991.00	1116.00‡
	†480	**60	#0-560	3.0	2.9	69.50	....
	†480	**60	#0-560	3.0	2.9	83.00	....
	†480	**60	#0-560	6.0	5.8	105.00	....
	†480	**60	#0-560	6.0	5.8	117.00	....
	†480	**60	#0-560	9.0	8.7	170.00	295.00
Y	†480	**60	0-560	28.0	27.2	394.00	519.00
Y	†480	**60	0-560	56.0	54.3	991.00	1116.00‡

Type 116



Type 1256C



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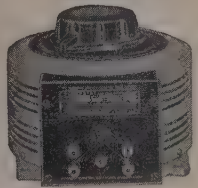


Type 136

FOOTNOTES TO ADJACENT TABLE

††**Letters in Part Numbers Indicate as follows:**
2PF—Two-prong parallel-blade plug and receptacle, cartridge type fuse and holder.
2TF—Same as 2PF except twist-lock plug and receptacle.
3PF—Same as 2PF except with third wire grounded to frame.
3PN—Same as 3PF except NEMA plug and receptacle.
3TF—Same as 3PF except twist lock plug and receptacle.
Suffix letters and numbers (2, 2S, 4P, 6P, etc.), indicate ganged units. Numeral shows number of units in assembly.
U—Supplied without protective screening, terminal enclosure, input cord, output receptacle, fuse or switch.

*Motor speeds designated by time for full range travel:
136-236 Series: For 5 seconds, prefix 5MB to type number; for 15 seconds, prefix 15MB; for 30 seconds, prefix 30MB; for 60 seconds, prefix 60MB. (For example, 15MB236-3).
1156C-1256C Series: For 5 seconds, prefix 5M to type number; for 15 seconds, prefix 15M; for 30 seconds, prefix 30M; for 60 seconds, prefix 60M. (For example, 15M1156C-2S).

‡Not available in 5 second speed.

‡‡Requires also choke type T5000 at $13.00 additional.

**If the maximum output voltage is limited to the input voltage, the frequency range is 50-60 cycles.

#Unit supplied with terminals for limiting output voltage to line voltage if desired. Other units must be ordered "L" connected.

†Also has terminals for operating at ½ this input voltage.

§Also available as 2TF, 3PF, 3TF and 3PN types.

SMALL FRAME POWERSTATS® WITH HIGH CURRENT RATINGS

Type 117

Provide higher load ratings where above line voltage is not required. For 60 cycle service. Type 117 delivers an output of 0-120 v., 10.0 amps. from an input of 120 v., single phase. Type 217 has an output of 0-240 v., 4.0 amps. from an input of 240 volts, single phase. For a constant-impedance load allowable output current at maximum voltage position is 13.0 amps. for type 117 and 6.3 amps. for type 217. Available in single units, two- and three-gang assemblies in either screened or open construction. Single units also available as plug-in types with either 2-wire or 3-wire input cord-plug sets, output receptacles, switches and fuses. Single units 4¾" d. x 5¼" h. Shipping Weight, 12 lbs. Data sheet on request.

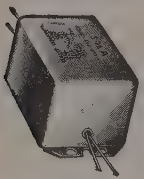
Type 117—Price Each $22.50
Type 217—Price Each 25.00

TYPE 2PF10 POWERSTAT®

Ideally suited for laboratory, inspection, classroom and other applications where current requirements do not exceed 1.0 ampere. The "Powerstat" type 2PF10 is housed in a compact gray casting only 3½" high, and 3½" in diameter. It provides a light, portable variable AC voltage source for 0-132 volts, 1.0 amp., 132 VA output from a 120 volt, 60 cycle, single phase input. Working surfaces can be kept free of unnecessary wiring because of the unique 6 foot cord and plug which provides two receptacles and a 1.0 amp. fuse housed in the plug end of the cord. Unit has readily accessible "on-off" switch and well defined dial graduation for fast, accurate reading. Shipping Weight, 3.3 lbs.

Type 2PF10 —Price Each $16.50

Voltage Regulators, Transformers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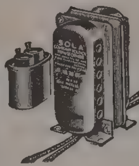
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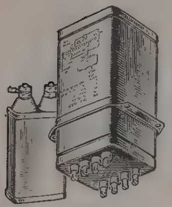
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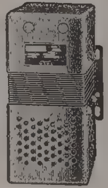
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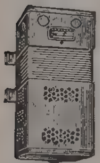
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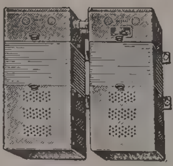
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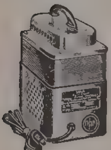
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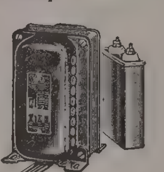
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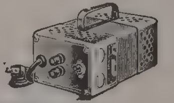
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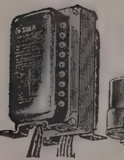
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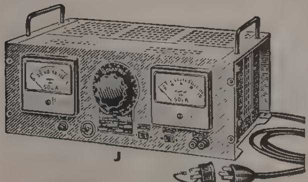

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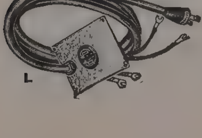
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SOLA CONSTANT VOLTAGE TRANSFORMERS

NORMAL-HARMONIC TYPE

Regulate voltage output within ±1% regardless of input voltage variations as gre ±15%. Average 14% total rms harmonic content. Provide regulated voltage for filam relays and solenoids. Ideal for use as built-in components.

Sola No.	Fig.	Volt-Amps	Voltage		Case *	Overall Size, Inches
			Input	Output		
20-10-015	A	15	95-130	118	1	5 9/16 x 2⅝ x 3½
20-11-015	B	15	95-130	118	2	5½ x 3½ x 2¼
20-14-015	C	15	95-130	118	3	4 5/16 x 2⅜ x 2 7/16
20-13-030	D	30	95-130	118	4	6 x 4 x 5 3/16
20-13-060	D	60	95-130	118	4	6 13/16 x 4 x 5 3/16
20-13-112	D	120	95-130	118	4	7⅞ x 4 x 5 3/16
20-21-112	D	120	190-260	236	4	7⅞ x 4 x 5 3/16
20-13-115	D	150	95-130	118	4	8⅞ x 5⅜ x 7 7/16
20-13-125	D	250	95-130	118	4	11⅛ x 6 15/16 x 6 7/16
20-23-125	D	250	190-260 x 380-520	118	4	11⅛ x 6 15/16 x 6 7/16
20-13-150	D	500	95-130	118	4	12½ x 6 15/16 x 6 7/16
20-23-150	D	500	190-260 x 380-520	118	4	12½ x 6 15/16 x 6 7/16
20-24-150	D	500	190-260 x 380-520	236	4	12½ x 6 15/16 x 6 7/16
20-13-210	D	1000	95-130	118	4	15⅛ x 6 15/16 x 6 7/16
20-20-210	D	1000	190-260	118	4	15⅛ x 6 15/16 x 6 7/16
20-25-220	E	2000	95-130 x 175-235 x 190-260	118 x 236	4	21½ x 10½ x 9 1/16
20-25-230	E	3000	95-130 x 175-235 x 190-260	118 x 236	4	27 11/16 x 10½ x 9 1/16
20-27-250	E	5000	190-260 x 380-520	118 x 236	4	21 x 14½ x 14⅜
20-26-310	F	10000	190-260 x 380-520	118 x 236	5	21 x 29 7/16 x 14⅜

STANDARD SINUSOIDAL TYPE

Regulate voltage output within ± 1% regardless of input voltage variations as gre ±15%. Ultra-fast regulating action. Response time is usually 1.5 cps or less. Less tha total rms harmonic content. Particularly suitable for use with equipment having ele sensitive to power frequencies harmonically related to the fundamental.

Sola No.	Fig.	Volt-Amps	Input	Output	Case *	Overall Size, Inches
23-13-060	D	60	95-130	118	4	6 15/16 x 4 x 5 3/16
23-13-112	D	120	95-130	118	4	8½ x 5⅜ x 7 7/16
23-13-125	D	250	95-130	118	4	11¼ x 9 x 6 7/16
23-13-150	D	500	95-130	118	4	12⅝ x 9 x 6 7/16
23-13-210	D	1000	95-130	118	4	17 15/16 x 9 x 6 7/16
23-25-220	E	2000	95-130 x 175-235 x 190-260	118 x 236	4	21⅜ x 12¾ x 10 9/16
23-25-230	E	3000	95-130 x 175-235 x 190-260	118 x 236	4	29⅛ x 12¾ x 10 9/16
23-26-250	F	5000	190-260 x 380-520	118 x 236	5	23⅛ x 25 13/16 x 10 9/16
23-28-275	...	7500	190-260 x 380-520	118 x 236	6	23⅛ x 38¼ x 10 9/16

*Transformer case: **1**—Drawn case; **2**—Hermetically sealed case; **3**—End bell unit separate capacitor; **4**—Housed unit; **5**—Duplex housed unit; **6**—Triplex housed

PLUG-IN TYPE TV VOLTAGE REGULATOR (FIG. G)

For stabilizing input voltage to TV sets. Will provide a nominal output of 115-120 volts on an input of 95-130 volts, stabilizing it to ±3% or less. No wiring necessary—just plug in between set and wall outlet.

Sola No. 72103—For sets with manufacturer's rating of 105 to 170 watts power input. Output capacity, 180 VA. Size, 8 1/16" x 4½" x 7¼" h. Shipping Wt., 20 lbs. Net Each.............. **$34.50**

Sola No. 72104—For sets with manufacturer's rating of 165 to 285 watts power input. Output capacity, 300 VA. Size, 8 15/16" x 4½" x 7½". Shipping Weight, 27 lbs. Net Each...... **$37.50**

PLATE-FILAMENT TYPE (FIG. H)

Delivers filament and plate voltages regulated within ±3% or less, with line voltage variations of 100-130 volts. Furnished complete with capacitor and capacitor mounting bracket (capacitor not wired to transformer for flexibility). **No. 7104:** 4 13/16" x 3⅛" x 3 3/16". **No. 7106:** 4 13/16" x 3⅛" x 3 15/16". **No. 7107:** 7" x 4½" x 5".

Sola No.	DC Input Volts To Filter	Shpg. Lbs.	Net Each
7104	275 VDC @ 50 ma	5	$12.00
7106	385 VDC @ 110 ma	8	15.00
7107	380 VDC @ 250 ma	19	27.00

FILAMENT TYPE

Sola No.	Fig.	Volt-Amps	Input Volts*	Net Each
20-01-015	A	15	95-125	$15.00
20-02-015	A	15	95-130	15.00
20-03-015	I	15	95-130	20.00
20-04-015	C	15	95-130	14.00
20-06-015	C	15	95-130	14.00
20-04-030	C	30	95-130x190-260	16.00
20-04-065	C	65	95-130x190-260	20.00
20-04-095	C	95	95-130x190-260	24.00
20-04-113	C	113	95-130x190-260	31.00
20-04-116	C	116	95-130x190-260	35.00

*Regulated ±1% output; Nos. 20-01-015, 20-06-015, 6.0 v.; all others, 6.3 v.

237X-59A

SOLAVOLT ADJUSTABL AC VOLTAGE SUPPLY (FIG. J)

Adjustable and regulated AC voltag plies with sinusoidal output design use with equipment that requires co AC voltage from 0-130 volts of undis wave-shape. Recommended for oper involving elements which are sensit power frequencies harmonically rela the fundamental. Solavolt units p voltage regulation of ±1% for line changes from 100-130 volts, with les 3% harmonic content at full load sponse time is 1.5 cps or less. One tacle for fixed, regulated 115 v.; o variable regulated 0-130 v. output, pair of jacks. Meters show voltag current outputs.

Sola No. 23-90-150—7½ amps max. VA. 19" w. x 12 11/16" d. x 9" h. (incl dles). Shpg. Wt., 77 lbs. Net Each...................... **$27**

PORTABLE FILAMENT VOLTAGE TYPE

Regulated ±1% output, 6.3 v. handle, input cord, output jacks and switch.

Sola No.	Fig.	Volt-Amps	Input Volts
20-05-030	K	30	95-130

ADAPTER KITS (FIG. L)

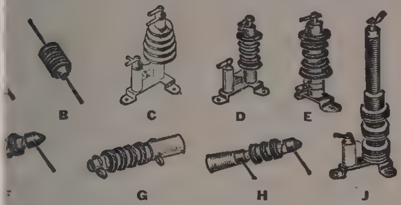
Convenient input cord and output tacle or jacks for regulators listed table.

Sola No.	Input Cord	Output
999-004*	2-wire	2-wire receptacle
999-015*	3-wire	2 jacks
999-018*	3-wire	3-wire receptacle
999-005†	2-wire	2-wire receptacle
999-016†	3-wire	2 jacks
999-019†	3-wire	3-wire receptacle
999-009‡	2-wire	2-wire receptacle
999-017‡	3-wire	2 jacks
999-020‡	3-wire	3-wire receptacle

*For Nos. 20-13-030, 20-13-060, 20-1 and 23-13-060. †For Nos. 20-13-115, 112. ‡For Nos. 20-13-125, 20-13-150, 125, 23-13-150.

Chokes, Components

RECEIVER AND TRANSMITTER CHOKES



R-33: Medium current capacity; pie wound on molded forms; 5/8" long with 1½" leads. **Series R-50:** Low current ; pie wound on molded phenolic forms; 1" long with 1½" **eries R-60:** High current capacity; lateral layer wound on phenolic forms; 1⅛" long with 1½" leads. **Series R-100:** rent capacity; wound on ceramic forms with molded-lead d 2" tinned-copper pigtail leads; 2" long. **Series R-300:** s R-100 but high current capacity; 2⅙" long. **Series** : Low current capacity; wound on ceramic forms with lated spring clip terminals; 1 15/16" long. **Series R-300S:** R-100S but high current capacity. **Series R-100ST:** Low capacity; wound on ceramic forms with 3" tinned-copper and threaded studs at each end; 1⅞" long. **Series R-300ST:** R-100ST but high current capacity. **Series R-100U:** Low capacity; wound on ceramic forms with molded-lead ends, d-copper pigtail leads and a stand-off insulator; 2 11/16" long. **R-300U:** Same as R-100U but high current capacity.

o	Fig.	Ind. ±10%	Freq. Mc†	Cur. Ma*	No. Pies	Coil Dia.	Net Each
	A	11 µh	32.0	350	2	1/4"	40c
	A	50 µh	16.5	225	2	5/16"	40c
0	A	100 µh	10.5	200	2	5/16"	40c
0	A	750 µh	4.7	125	2	15/32"	40c
	B	0.5 mh	5.5	150	3	13/32"	40c
	B	1.0 mh	4.1	135	3	15/32"	40c
	B	2.5 mh	2.7	125	4	1/2"	40c
#	B	10.0 mh	1.3	115	3	17/32"	61c
	B	2.0 µh	160.0	1500	....	5/16"	40c
	B	4.0 µh	110.0	700	....	5/16"	40c
5	F	0.5 mh	5.0	125	4	13/32"	40c
5	F	2.5 mh	2.4	115	4	1/2"	40c
	F	5.0 mh	2.8	70	5	15/32"	40c
0	F	10.0 mh	2.2	60	5	9/16"	40c
2.5	G	2.5 mh	2.4	115	4	1/2"	48c
5	G	5.0 mh	2.8	70	5	15/32"	48c
10	G	10.0 mh	2.2	60	5	9/16"	48c
-2.5	....	2.5 mh	2.4	115	4	1/2"	46c
-5	....	5.0 mh	2.8	70	5	15/32"	46c
-10	....	10.0 mh	2.2	60	5	9/16"	46c
2.5	H	2.5 mh	2.4	115	4	1/2"	48c
5	H	5.0 mh	2.8	70	5	15/32"	48c
10	H	10.0 mh	2.2	60	5	9/16"	48c
5	F	5.0 mh	5.0	400	3	15/32"	44c
	F	1.0 mh	3.6	400	3	17/32"	44c
5	F	2.5 mh	2.2	375	3	11/16"	44c
	F	5.0 mh	1.8	325	3	25/32"	44c
0.5	G	0.5 mh	5.0	400	3	15/32"	48c
1	G	1.0 mh	3.6	400	3	17/32"	48c
2.5	G	2.5 mh	2.2	375	3	11/16"	48c
5	G	5.0 mh	1.8	325	3	25/32"	48c
T-0.5	....	0.5 mh	5.0	400	3	15/32"	46c
T-1	....	1.0 mh	3.6	400	3	17/32"	46c
T-2.5	....	2.5 mh	2.2	375	3	11/16"	46c
T-5	....	5.0 mh	1.8	325	3	25/32"	46c
-0.5	H	0.5 mh	5.0	400	3	15/32"	48c
-1	H	1.0 mh	3.6	400	3	17/32"	48c
-2.5	H	2.5 mh	2.2	375	3	11/16"	48c
-5	H	5.0 mh	1.8	325	3	25/32"	48c

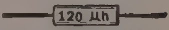
sonating; ±10%. *Rating for 20° C rise. #Wound on ed-iron coil form.

-152: For use in 2-4 mc range, 80- and 160-meter bands, in wer transmitter stages. Pie wound on ceramic form. 3⅛" **ype R-154:** For use in 20-, 40- and 80-meter bands. Pie on ceramic fom. Has third mounting foot and an insulator ermits use of higher voltages by providing longer path to . 3⅛" high. **Type R-154U:** Same as R-154 but without third ng foot and without small insulator. **Type R-175A:** Parallel-ies-feed in transmitters with plate supply up to 3000 v. ted or 4000 v. unmodulated. High reactance throughout 15-, 20-, 40- and 80-meter bands. 6" high.

Fig.	Ind. Mh*	Freq. Mc†	DC Ohms#	Cur. Ma§	No. Pies	Coil Dia.	Net Each
C	4.0	1.6	10	600	5	1¼"	$2.01
D	1.0	4.5	6	600	5	1¼"	2.01
E	1.0	4.5	6	600	5	1¼"	1.61
J	145‡	5.0	5	800	3	1 1/16"	3.56

%. †Self-resonating; ±10%. #Approximate resistance. g for 20° C rise. ‡µh.

IL-INDUCTANCE CHOKES

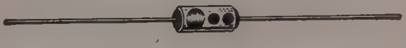


plete line of small solenoid wound chokes, 1.1 µh to 120 µh. ance values in accordance with MIL-C15305A. Phenolic per MIL-P14 from 1.1 µh to 15.0 µh; powdered iron forms 2.0 µh to 120 µh. Convenient mounting axial-lead structure. ted from heat, abrasion and rough handling by tough plastic Will withstand temperatures up to maximum current rating o sleeve discoloration. Windings are impregnated with a fungus-resistant varnish, per MIL-V173A. Ideal for use as filament chokes, peaking coils, and in high frequency circuits.

Natco No.	Ind. µh*	Min. Q @ Mc	Self Res. Freq.*	DC Ohms†	DC Current#	Net Each
R25-1.1	1.1	75/10	200 mc	.09	1400 ma	48c
R25-2.2	2.2	70/10	165 mc	.20	900 ma	48c
R25-3.3	3.3	55/6	130 mc	.32	750 ma	48c
R25-4.7	4.7	45/5	100 mc	.60	550 ma	48c
R25-6.8	6.8	40/4	90 mc	1.1	400 ma	48c
R25-10	10.0	40/3.5	65 mc	1.8	300 ma	48c
R25-15	15.0	40/3	55 mc	3.0	250 ma	48c
R25-22	22.0	40/2.5	25 mc	.30	700 ma	48c
R25-33	33.0	50/2	21 mc	.60	500 ma	48c
R25-47	47.0	80/1.5	18 mc	1.2	300 ma	48c
R25-82	82.0	90/1.2	15 mc	2.2	250 ma	48c
R25-100	100.0	100/1	13 mc	2.8	200 ma	48c
R25-120	120.0	100/1	11 mc	4.5	150 ma	48c

*±10%. †Approximate resistance. #Rating for 20° C rise.

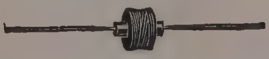
FERRITE BEAD CHOKES



Designed for use as filament chokes, parasitic suppressors and series elements of low pass filters for 5 to 200 mc frequencies. Handle 2 amps filament current with less than 0.02 voltage drop. Fiberglas silicone rubber-covered sleeving protects from extreme humidity and temperature up to Ferrite Curie 125° C. Color coded for easy identification. Leads 1½" long.

Natco No.	At 5 mc		At 30 mc		At 100 mc		Net Each
	Ind., µh	Res., Ohms	Ind., µh	Res., Ohms	Ind., µh	Res., Ohms	
R45-1	0.32	15	0.10	25	.022	30	30c
R45-2	0.65	30	0.18	50	.024	60	38c
R45-3	1.0	45	0.27	75	.026	90	48c
R45-4	1.3	60	0.36	100	.028	120	59c

FERRITE CORE CHOKES



Relatively high "Q" values in small physical size; complete line includes 14 inductances fron 150 µh to 10 mh in MIL-SPEC values. Temperature coefficient less than 550 ppm per degree C for small coils; less than 250 ppm per degree C for 1 mh and over. Axial leads facilitate mounting directly to terminals. Fungus-proof varnish impregnated per MIL-V-173A provides maximum protection against tropical conditions. For primary use in networks and filters from 50 kc to 1500 kc; can be used as resonant elements in IF or RF circuits. Size: 5/8" long; 9/16" max. dia. (7/32" min. dia.) with 1½ leads.

Natco No.	Inductance*	Nom. Q @ kc	Self-Res. Freq.*	DC Ohms†	DC Current#	Net Ea.
R40-150	150 µh	200/790	7.9 mc	2.1	250	48c
R40-220	220 µh	200/790	7 mc	2.7	250	48c
R40-330	330 µh	200/790	6 mc	3.5	250	48c
R40-470	470 µh	200/790	4.9 mc	4.2	225	48c
R40-680	680 µh	200/790	4.3 mc	5.3	200	48c
R40-820	820 µh	200/790	3.9 mc	5.9	200	48c
R40-1	1 mh	200/790	3.3 mc	7.2	175	48c
R40-1.5	1.5 mh	160/250	2.5 mc	10.5	150	48c
R40-2.2	2.2 mh	130/250	1.9 mc	11.7	150	48c
R40-3.3	3.3 mh	120/250	1.6 mc	15.7	125	48c
R40-4.7	4.7 mh	120/250	1.3 mc	20.5	100	48c
R40-6.8	6.8 mh	120/250	1.1 mc	26	80	48c
R40-8.2	8.2 mh	90/250	980 kc	28	80	48c
R40-10	10 mh	80/250	850 kc	32	80	48c

*±10%. †Approximate resistance. #Rating for 20° C rise ma.

MISCELLANEOUS MOUNTING INSULATORS

Type XS-1—Insulator fits panels up to 11/16" thick; mounts in 1" hole. 3½" overall x 1¼" dia.; mounting face of each insulator, 1⅛" dia. Includes two insulators, stud, four nuts, two lugs, two washers. Net Pair **83c**

Type XS-2—Steatite insulator fits panels up to 11/16" thick; requires 1½" hole. Nickel-plated brass studs and nuts; cadmium-plated copper lugs; nickel-plated brass and lead washers. Thread, 10-32. Net Pair **93c**

Type XS-3—Larger version of XS-1 and XS-2. For 2¾" panel mounting hole. Thread. 5/16-18. Net Pair **$4.13**

Type XS-4—Larger version of XS-3. Fits 3¾" panel hole. Thread, 5/16-18. Net Pair **$4.98**

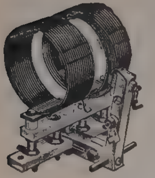
Type XS-7—Both insulators are steatite; nickel-plated brass stud and nuts; copper lugs; lead washers. 2¼" overall x 5/8" dia. Fits panels up to ¼" thick, in 3/8" hole. Thread, 6-32. Net Each (In package of 10) **42c**

Type XS-8—Steatite insulators; nickel-plated brass studs and nuts; copper lugs; lead washers. 2⅞" overall x 7/8" dia.; for panels up to 3/8" thick; fits ½" holes. Thread, 8-32. Net Each (In package of 10) **55c**

Type XS-9—Steatite feed-through insulator. Adjustable on silver-plated brass terminal stud for thicknesses of .045". Stainless steel lockwasher; nickel-plated brass hex nut; bakelite and nickel-plated brass washers. 17/32" overall x 3/8" dia.; fits in .203" hole. Thread, 2-56. Net Each (In package of 10) **35c**

Inductors and Turrets

BARKER AND WILLIAMSON EQUIPMENT



AIR INDUCTORS

Minimum dielectric, low loss, and rugged structure. Equipped with banana plugs. Type "B" for oscillator and doubler-buffer stages up to 100 W. Type "T" is for high power neutralized buffer and final tank stages up to 500 watts. Type "HD" for maximum power; handles 1 kw with ease.

JACK BARS

B & W No.	Coil Type	Net Each
3228	B, BA	$0.96
3253	BX	1.35
3321	T, 3400, TA	1.56
3513	TVH	1.74
3721	HD, HDA	2.16

TYPE B

Without Link—Center Tapped

B & W No.	B & W Type	Band Met.	Net Each
3200	6B	6	$1.86
3201	10B	10	1.86
3202	15B	15	2.07
3203	20B	20	2.07
3204	40B	40	2.40
3205	80B	80	2.97
3206	160B	160	3.33
End Link—Without Tap			
3207	6BEL	6	$3.39
3208	10BEL	10	3.39
3209	15BEL	15	3.42
3210	20BEL	20	3.42
3211	40BEL	40	3.90
3212	80BEL	80	4.38
3213	160BEL	160	4.77
Center Link—Center Tapped			
3214	6BCL	6	$3.39
3215	10BCL	10	3.39
3216	15BCL	15	3.42
3217	20BCL	20	3.42
3218	40BCL	40	3.90
3219	80BCL	80	4.38
3220	160BCL	160	4.77
Var. Link—Center Tapped			
3221	6BVL	6	$2.67
3222	10BVL	10	2.67
3223	15BVL	15	2.76
3224	20BVL	20	2.76
3225	40BVL	40	3.15
3226	80BVL	80	3.57
3227	160BVL	160	3.96

TYPE T

Straight Center Tapped

3301	10T	10	$2.07
3302	15T	15	2.25
3303	20T	20	2.25
3304	40T	40	2.67
3305	80T	80	3.15
3306	160T	160	3.57

TYPE T (Cont'd)

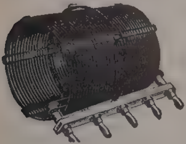
Center Link—Center Tapped

B&W No.	B & W Type	Band Met.	Net Each
3308	10TCL	10	$3.96
3309	15TCL	15	4.11
3310	20TCL	20	4.11
3311	40TCL	40	4.56
3312	80TCL	80	5.04
3313	160TCL	160	5.43
Var. Link—Center Tapped			
3315	10TVL	10	$3.03
3316	15TVL	15	3.15
3317	20TVL	20	3.15
3318	40TVL	40	3.57
3319	80TVL	80	4.11
3320	160TVL	160	4.29

TYPE HD

Without Link—Center Tapped

3701	10HD	10	$4.29
3702	15HD	15	5.19
3703	20HD	20	5.19
3704	40HD	40	5.67
3705	80HD	80	6.63
3706	160HD	160	8.07
Center Link—Center Tapped			
3708	10HDCL	10	$8.04
3709	15HDCL	15	9.00
3710	20HDCL	20	9.00
3711	40HDCL	40	9.48
3712	80HDCL	80	10.41
3713	160HDCL	160	11.85
Var. Link—Center Tapped			
3715	10HDVL	10	$6.18
3716	15HDVL	15	7.14
3717	20HDVL	20	7.14
3718	40HDVL	40	7.50
3719	80HDVL	80	8.52
3720	160HDVL	160	9.96



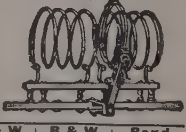
ANTENNA INDUCTORS

Types TA and HDA Antenna Inductors are wound with tinned copper wire for ease in tapping feeders to coils. Equipped with fixed center links for coupling to either fixed or variable linked final tank circuits through a low impedance line. Type TA coils for power input up to 500 W. Type HDA coils for power input up to 1 Kw.

TYPE TA					TYPE HDA			
B&W No.	B&W Type	L.F. Res. Cap. μμf	Net Each	Band Met.	B&W No.	B&W Type	L.F. Res. Cap. μμf	Net Each
3601	10TA	20	$3.96	10	3607	10HDA	20	$ 8.07
3602	15TA	23	4.11	15	3608	15HDA	20	9.00
3603	20TA	23	4.11	20	3609	20HDA	20	9.00
3604	40TA	34	4.56	40	3610	40HDA	20	9.48
3605	80TA	50	5.04	80	3611	80HDA	34	10.41
3606	160TA	.....	5.43	160	3612	160HDA	.....	11.85

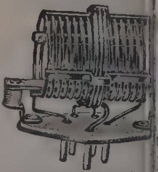
TYPE TVH AIR INDUCTORS

Type TVH are for up to 500 W. input. These units can be used with a split stator capacitor of 50 μμf per side for the 10, 20, 40 meter bands and for the 80 meter band with the addition of a 25 μμf padding capacitor. Net Each.................. $5.43



B & W No.	B & W Type	Band Meters	B & W No.	B & W Type	Band Meters
3501	10TVH	10	3504	40TVH	40
3502	15TVH	15	3505	80TVH	80
3503	20TVH	20	3506	160TVH	160

JUNIOR INDUCTORS



Rated up to 75 watts input. Fitted with standard five-prong steatite base. Small size for compact construction. May be used in the oscillator, buffer or final amplifier stage up to 75 watts and plate voltages up to 850 V. Three different assemblies provided any of which may be used in capacity coupled circuits by omitting connection to links. Net Each....... $1.86

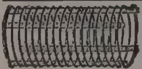
END LINK		CENTER LINK*		VARIABLE LINK*		
B & W No.	B & W Type	B & W No.	B & W Type	B & W No.	B & W Type	Ba Mt
3100	6JEL	3107	6JCL	3114	6JVL	
3101	10JEL	3108	10JCL	3115	10JVL	1
3102	15JEL	3109	15JCL	3116	15JVL	1
3103	20JEL	3110	20JCL	3117	20JVL	2
3104	40JEL	3111	40JCL	3118	40JVL	4
3105	80JEL	3112	80JCL	3119	80JVL	8
3106	160JEL	3113	160JCL	3120	160JVL	1

*Center tapped.

TYPE M ("BABY") AIR INDUCTORS

Compact, highly efficient, sturdy "baby" coils for low powere buffer stages in single-ended or push-pull circuits. Rated for i powers to 35 watts. Type M—Straight untapped. Type M Center tapped. Type MEL—End linked. Type MCL—Ce linked center tapped. Mounts in 5-prong tube socket.

B & W. No. by Amateur Bands							Type	Ne Ea
160	80	40	20	15	10	6		
2905	2904	2903	2902	2901	2900	2927	M	$1
2912	2911	2910	2909	2908	2907	2928	MC	
2919	2918	2917	2916	2915	2914	2929	MEL	
2926	2925	2924	2923	2922	2921	2930	MCL	

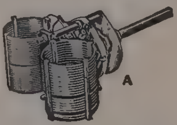


MINIDUCTORS

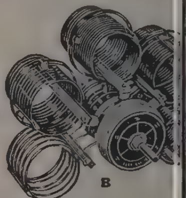
For use in limited space. Can be cu size. Amazingly high Q characteri Useful for tank circuit coils, RF cho HF IF transformers, loading coils, et

2 INCH				3 INCH			
B & W No.	Dia., In.	Turns Per In.	Net Each	B & W No.	Dia., In.	Turns Per In.	Ne Eac
3001	½	4	$0.45	3013	1	4	$0.
3002	½	8	.45	3014	1	8	
3003	½	16	.45	3015	1	16	
3004	½	32	.45	3016	1	32	
3005	⅝	4	.54	3017	1¼	4	
3006	⅝	8	.54	3018	1¼	8	
3007	⅝	16	.54	3019	1¼	16	
3008	⅝	32	.54	3020	1¼	32	
3009	¾	4	.63	3021	1¾	4	
3010	¾	8	.63	3022	1¾	8	
3011	¾	16	.63	3023	1¾	16	
3012	¾	32	.63	3024	1¾	32	

TURRET ASSEMBLIES



A



B

Fast, positive band switching. Unique switching assembly al unused coils to be shorted, thus eliminating absorption ef All units cover 80, 40, 20, 15, 10 meter bands.

B & W 75 Watt 2A "Band Hoppers" Fig. A—Uses same design as B & W Juniors. Compact, panel controlled unit. be used for interstage coupling between beam power tubes beam power tubes or triodes.

B & W No. 3121—Net Each......................... $6

B & W Turrets Fig. B—Provide a means of link coupling. plete assembly mounted on positive action switch arrange panel mounting through a single ⅜" hole. 75 W. turrets ar use only up to 850 volts, 150 W. turrets are rated at 1000 V.

75 WATT				150 WATT			
B & W No.	B & W Type	Link	Net Each	B & W No.	B & W Type	Link	N Ea
3810	JTCL	Ctr., C.T.	$12.96	3812	BCL	Ctr., C.T.	$16
3811	JTEL	End	12.96	3813	BEL	End	16

3400 SERIES INDUCTORS

Rated up to 500 watts. Same as those supplied to armed forces during war. 360° adj. center coupling permits matching up to 600 ohms.
Net Each........... $10.35

B & W No.	Band Mtrs.	B & W No.	B M
3401	10	3404	
3402	15	3405	
3403	20	3406	1

ontrol and Instrument Knobs

. H. SMITH BAKELITE KNOBS

INSTRUMENT KNOBS

A Plain B With Pointer C With Skirt

black bakelite instrument knobs with molded-in brass or ¼″ shafts. **Style B** has white vinyl pointer. **Style C** is pe with white indicator line. **Style D** is similar to Style A with protruding brass insert for mounting special dials nters.

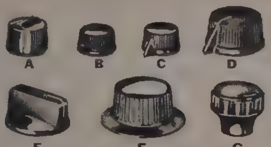
Smith o.	Style	O.D.	Special	Height	Net Each
00	A	1⅛″	....	⅝″	26c
01	A	1⅜″	....	11/16″	27c
02	A	1⅝″	....	¾″	30c
03	A	2⅜″	....	⅞″	44c
04	B	1⅛″	¾″ pointer	11/16″	39c
05	B	1⅜″	1 1/16″ pointer	¾″	40c
06	B	1⅝″	1 3/16″ pointer	13/16″	43c
07	B	2⅜″	1 9/16″ pointer	15/16″	57c
08	C	1⅛″	1½″ skirt	13/16″	48c
09	C	1⅜″	1¾″ skirt	⅞″	51c
10	C	1⅝″	2 1/16″ skirt	29/32″	60c
11	C	2⅜″	3″ skirt	1 1/32″	78c
12	D	1⅛″	....	23/32″	31c
13	D	1⅜″	....	25/32″	32c
14	D	1⅝″	....	27/32″	36c
15	D	2⅜″	....	31/32″	51c
16	......	1½″	Skirt only	......	8c
17	......	1¾″	Skirt only	......	9c
18	......	2 1/16″	Skirt only	......	11c
19	......	3″	Skirt only	......	15c

POINTER KNOBS

A Length 1¼″ Height ⅝″ B Length 2″ Height ⅝″ C Length 1¼″ Height 9/16″

mith	Style	Type Hole	Color	Net Each
0	A	¼″ plain	Black	10c
1	A	¼″ plain	Walnut	11c
2	A	¼″ plain	Ivory	11c
3	A	¼″ brass insert	Black	15c
4	A	¼″ brass insert	Walnut	17c
5	A	¼″ brass insert	Red	17c
6	B	¼″ plain	Black	20c
7	B	¼″ plain	Walnut	19c
8	B	¼″ brass insert	Black	26c
9	B	¼″ brass insert	Walnut	26c
0	C	¼″ plain	Black	12c
1	C	¼″ plain	Walnut	10c

CONTROL KNOBS

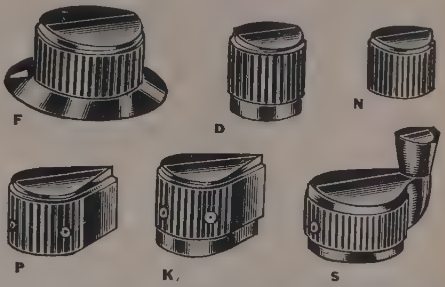


Bakelite control knobs. Supplied with ¼″ molded hole. te with set screw.

mith	Style	O.D.	Height	Color	Net Each
0	A	¾″	19/32″	Black	11c
1	A	¾″	19/32″	Walnut	12c
2	B	11/16″	13/32″	Black	8c
3	B	11/16″	13/32″	Walnut	8c
4*	B	1″	½″	Black	13c
5*	B	1″	½″	Walnut	12c
6	C	11/16″	13/32″	Black	8c
7	C	11/16″	13/32″	Walnut	8c
8*	D	1″	½″	Black	16c
9*	D	1″	½″	Walnut	15c
0*	E	1⅛″	9/16″	Black	13c
1*	E	1⅛″	9/16″	Walnut	14c
2*	F	1½″	11/16″	Black	15c
3*	F	1½″	11/16″	Walnut	17c
4*	F	1½″	11/16″	Ivory	17c
8	G	⅞″	¾″	Black	13c
9	G	⅞″	¾″	Walnut	13c

ed for locknut.

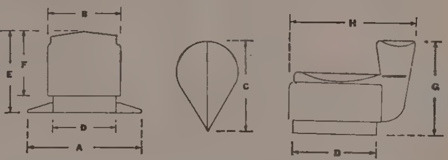
NATIONAL
KMS SERIES CONTROL KNOBS



Made in conformance to MS-91528 and MIL-K-3926. Six styles in five sizes, three shaft diameters, two finishes and a variety of optional features cover your every knob requirement. Knobs are supplied with two #5-40 or #8-32 NC-2B Allenhead set screws placed 90° apart. Other set screw arrangements available to your specifications. Optional white dot available on two styles. Other special variations available on special order: Color combinations; no caps; plain or calibrated dial skirts. **Material:** Plastic, type III, class H2 per specification L-P-349. **Set Screws:** Cadmium-plated, class 3, type II per specification QQ-P-416. **Inserts:** Brass, composition 4, hard, per specification QQ-B-613.

Matte Black						Glossy Black	
Natco No.	Lots 1-99 Net Ea.	Size†	Fig.	Shaft Dia., In.	MIL* Spec.	Natco No.	Lots 1-99 Net Ea.
7N1D	$0.72	7	N	⅛	1N1D	7N1S	$0.67
7N2D	.67	7	N	¼	1N2D	7N2S	.62
7D1D	.80	7	D	⅛	1D1D	7D1S	.75
7D2D	.75	7	D	¼	1D2D	7D2S	.70
7F1D	.88	7	F	⅛	1F1D	7F1S	.83
7F2D	.83	7	F	¼	1F2D	7F2S	.78
7P2D	.67	7	P	¼	1P2D	7P2S	.62
7K1D	.80	7	K	⅛	1K1D	7K1S	.75
7K2D	.75	7	K	¼	1K2D	7K2S	.70
9N2D	.71	9	N	¼	2N2D	9N2S	.66
9D2D	.79	9	D	¼	2D2D	9D2S	.74
9F2D	.87	9	F	¼	2F2D	9F2S	.82
9P2D	.75	9	P	¼	2P2D	9P2S	.70
9K2D	.83	9	K	¼	2K2D	9K2S	.78
12N2D	.75	12	N	¼	3N2D	12N2S	.70
12D2D	.83	12	D	¼	3D2D	12D2S	.78
12F2D	.91	12	F	¼	3F2D	12F2S	.86
12S2D	1.87	12	S	¼	3S2D	12S2S	1.82
17N2D	.87	17	N	¼	4N2D	17N2S	.82
17D2D	.95	17	D	¼	4D2D	17D2S	.90
17F2D	1.07	17	F	¼	4F2D	17F2S	1.02
17S2D	2.03	17	S	¼	4S2D	17S2S	1.98
22N2D	.99	22	N	¼	5N2D	22N2S	.94
22D2D	1.07	22	D	¼	5D2D	22D2S	1.02
22F2D	1.19	22	F	¼	5F2D	22F2S	1.14
22S2D	2.11	22	S	¼	5S2D	22S2S	2.06

*MS-91528.



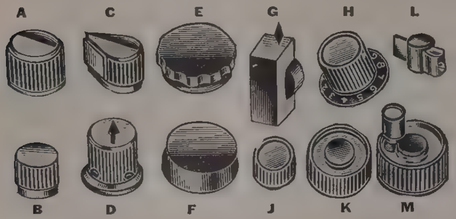
†SIZE

Key	A	B	C	D	E	F
7	1.130″	0.703″	1.045″	0.610″	0 780″	0.620″
9	1.505″	0.906″	1.354″	0.781″	1.010″	0.800″
12	1.817″	1.250″	....	1.119″	0.850″	0.700″
17	2.448″	1.750″	....	1.618″	1.073″	0.850″
22	3.000″	2.250″	....	2.125″	1.099″	0.875″

WE CARRY A COMPLETE SUPPLY OF KNOBS FOR ALL PURPOSES. FOR INFORMATION ABOUT SPECIAL APPLICATION ITEMS AND NEW DESIGNS, WRITE US FOR COMPLETE DATA.

National Control Knobs and Dials

CONTROL KNOBS



The knobs illustrated in Figs. A, B and C are all made of top quality Tenite II and have an anodized aluminum insert and two cadmium-plated, fluted, Bristo head set screws. They are available in black matte finish, or can be had with different colored caps and cap shapes to your specifications or to military standards.

Natco No.	Description	Diameter x Height	Fig.	Net Ea.
A15740	Round, with locating dot.	15/16"x.90"	A	60c
A15739	Round, with peaked cap; no dot.	15/16"x.90"	A	56c
A15741	Round, flush-type, with peaked cap and locating dot.	.696"x.776"	A	60c
A15390	Round, flush-type, with peaked cap; no dot.	.696"x.776"	A	56c
A15578	Round, flush-type, with flat top and locating dot.	.696"x.776"	A	56c
A15754	Round, flush-type, with flat top; no dot.	.696"x.776"	A	50c
A15577	Round, skirted, with cap and locating dot.	.696"x.676"	B	60c
A15755	Round, skirted, with cap; no dot.	.696"x.676"	B	56c
A15579	Round, skirted, with flat top and locating dot.	.696"x.676"	B	56c
A15753	Round, skirted, with flat top; no dot.	.696"x.676"	B	50c
A15471	Pointer knob.	.696"x.776"*	C	56c

*.69" center hole to pointer end; 1.32" overall width.

Type HRM (Fig. D)—Fully knurled, brass, satin-chromed and burnished. Black enameled arrowhead. Overall width: With skirt, 5/8"; less skirt, 1/2". Overall height, with skirt, 5/8". Fits 1/4" shaft. Net Each............................ **58c**

Type HRK (Fig. E)—Fluted black bakelite knob. Diameter: 2 3/8"; back, 2 1/4". Front to back, 1 7/8". Fits 1/4" shaft. With two 8-32 set screws. Net Each............

Type VD-16 (Fig. F)—Rugged, crack-resisting, with full kn for maximum sensitivity. In black standard finish. Fits 1/4" shaft. Net Each............

Type VD-16A (Fig. F)—Fits 3/16" shaft. Net Each........

Type HRP-P (Fig. G)—Nickel-plated brass pointer. For u wafer and other rotary switches. Dimensions: 1 1/4" long, 3/4" 11/16" front to back. Fits 1/4" shaft. With two 8-32 set screws. Net Each............

Type HRP (Fig. G)—Type HRP-P without pointer. Cho 6-32 or 8-32 thread. Net Each............

Type HRS (Fig. H)—These knobs have easy-grip knu Molded of gray or black Tenite; other colors on special Chrome plated skirt with black-enameled numbers. 1 7/16" dia. 1/4" shafts. Specify color when ordering.

Type HRS-3—Calibrated 0-10, 300°. Net Each..........

Type HRS-4—Single etched line. Net Each..........

Type HRS-5—Calibrated 0-10, 180°. Net Each..........

Type HR (Fig. J)—No chrome plated skirts, but with op white dot or other markings per your order. Gray or black. Net Each............

Type HRT (Fig. K)—Chrome-plated inlay. 2 1/8" dia., fits 1/4" shaft. Gray or black (specify). Net Each............

Type HRT-M (Fig. K)—Smaller version of Type HRT. 1 1/2" dia. Fits 1/4" shafts. Net Each............

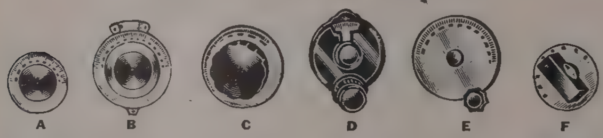
Type HRB (Fig. L)—Lever-type knob, die-cast in brigh alloy. Can be anodized in many colors. Uses 8-32 set-screws available in other set-screw sizes. Dimensions: 1 7/16" long, 5/8" wide, 5/8" high. Fits 1/4" shafts. Net Each............

Type HRT-MC (Fig. M)—Black or gray tenite with chrome- inner circle; cadmium plated steel spinner with black or anodized aluminum sleeve for easy rotation. Overall 1 1/2" knob fits 1/4" shaft. Net Each............

Type HRT-C (Fig. M)—Full size version of HRT-MC. O dia., 2 1/8"; 1/2" dia. spinner. Fits 1/4" shaft. Black or gray. Net Each............

Type PW-D (Not illustrated)—Revolves ten times in coveri complete range; no gear-reduction unit used, so drive shaf makes ten complete revolutions. Black bakelite fluted knob; finished die-cast zinc inner and outer dials. Depressed numbers on inner dial; depressed white lines (50 division outer dial. Special dial markings on order. 4 5/8" overall dia 1 7/16" face of knob to back of dial. Furnished complete wit pointer plate and one dial-mounting hub to fit 5/16" diameter shaft. Net Each............

DIALS FOR ALL PURPOSES



AM DIAL (Fig. A)—"Velvet Vernier" mechanism in a metal skirted dial 3" in diam. Ratio, 5 to 1. Fits 1/4" shaft.

Type AM—Blank dial scale. Net.	**$3.93**
Type AM-2 No. 2 scale.* Net...	**3.93**
Type AM-3—No. 3 scale.* Net...	**3.93**
Type AM-4—No. 4 scale.* Net...	**3.93**
Type AM-5—No. 5 scale.* Net...	**3.93**
Type AM-6—No. 6 scale.* Net...	**3.93**

N DIAL (Fig. B)—4" dial with engine-divided scale. Decimal vernier. Planetary drive has ratio of 5 to 1 and is contained within the body of the dial. For 1/4" shafts.

Type N—Blank dial scale. Net...	**$7.50**
Type N-2—No. 2 scale.* Net.....	**7.50**
Type N-3—No. 3 scale.* Net.....	**7.50**
Type N-4—No. 4 scale.* Net.....	**7.50**
Type N-5—No. 5 scale.* Net.....	**7.50**

AD DIAL (Fig. B)—Same as above, except with die stamped scale and pointer, rather than vernier. Blank only. Net Ea. **$4.49**

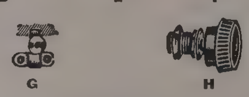
O DIAL (Fig. C)—3 1/2" diameter, scale 2, with HRK black bakelite knob, equipped with pointer. Fits 1/4" shafts. Net. . **$2.85**

B-1 DIAL (Fig. D)—"Velvet Vernier" dial with compact variable ratio 6 to 1 min., 20 to 1 maximum drive. Black bakelite case. Scale 1. Fits 1/4" shaft. Specify scale. Net Each......................... **$8.07**

BM DIAL (Fig. D)—Smaller version of B-1 for use where space is limited. Fixed drive ratio. Fits 1/4" shafts.

Type BM-1—No. 1 scale.* Net...	**$4.88**
Type BM-2—No. 2 scale.* Net...	**4.64**
Type BM-5—No. 5 scale.* Net...	**4.64**

K DIAL (Fig. E)—Same as O except less knob, complete with ODD vernier drive, scale 2 only. Net Each........... **$1.73**



*DIAL SCALES

	Divisions	Rotation	Dir. for Increase
1	0–100-0	180°	Either
2	0–100	180°	Counter C. W.
3	100–0	180°	Clockwise
4	150–0	270°	Clockwise
5	200–0	360°	Clockwise
6	0–150	270°	Counter C. W.

R DIAL (Fig. F)—1 5/8" diameter scale calibrated 0-10 in 180° for increased reading with clockwise rotation. Black bakelite knob. Fits 1/4" shaft. Net Each....... **69c**

ODL LOCK (Fig. G)—A locking device which clamps the rim of O, K dials. Brass, nickel plated. Net Each...... **38c**

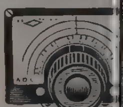
ODD VERNIER PINCH DRIVE (Fig. H)—For O, L or other plain dials. Net... **48c**

SB BUSHING (Not Ill.)—Nickel plated brass, 9/16" diameter. Fits 1/4" shaft. Net Each........................ **21c**

AN VERNIER MECHANISM (Not Ill.)—Ratio 5 to 1. Has insulated output shaft coupling for 1/4" shafts. Drive shaft fits 3/16" knob. Net Each................. **$3.02**

AVD VERNIER MECHANISM (Not Ill.)—Similar to AN. Output shaft not insulated. For commercial uses, many variations are available. Net Each..... **$2.30**

INDIVIDUALLY CALIBRATED DIALS



Employs 5:1 drive ratio Velvet Vernier mechanism. Long famous for their precision. Scales have numerical calibrations, and blank semi-circular portions for individual calibration.

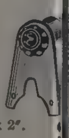
Type MCN—Especially suited to n installations and small units. Ma mounted on 3 1/2" rack panel. Dial pr 3 calibrating scales and a 0-100 lo scale. 2 3/4" high x 3 7/8" wide. Net...**$**

Type ACN—Is the original of thi dial, a National design for the benefit perimenters and others who desire calibration. 3 blank and one 0-100 5" high x 7 1/4" wide Net Each......**$**

Type SCN—Provides the same dial as the ACN dial described above bu reduced size. For restricted panel 4 7/16" high x 6 1/4" wide. Net Each...**$**

Type ICN—Is the illuminated vers the ACN dial. Two dial lights mount the top corners provide efficient and illumination on all bands. Window bl in semi-circular shape to prevent sha 5 1/8" high x 7 1/4" wide. Net Each...**$**

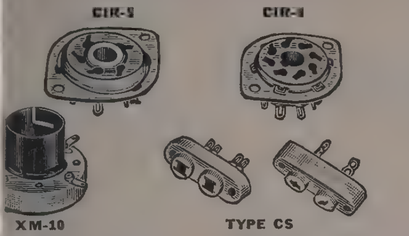
DIAL ILLUMINATOR KIT



For Type MCN Dial. Rotates with pointer over 180° to spotlight position. Mounts on screws that hold coupling to dial. No additional hardware needed. Comes complete with a #51 panel light for 6.3 volt operation. Requires a rectangular cut-out in panel 3 1/2" x 2". Net Each............

"Blue Chip" Components

TUBE AND CRYSTAL SOCKETS



IR-5—Grade L-5 ceramic construction conforming to)ecifications. Glazed top and sides for durability; unglazed s Dow-Corning 200 treated. Nickel plated brass mounting :ontacts silver-plated phosphor bronze with solder dipped /ailable with ears for stand-off mounting. Low-loss insulated .s grip tube prong for full length; metal ring for six- ı mounting. Mounting center, 1 27/32". Net Each...... **69c**

:IR-4—Same as above but designed for 4-prong tubes. .ch.. **60c**

:IR-6—Same as CIR-5 but for 6-prong tubes. .ch.. **69c**

.IR-8—Construction same as for CIR-5; designed for ƺed tubes. Nickel plated brass mounting plate; 1½" :nter. Net Each...................... **48c**

ΚM-10—Heavy-duty, metal-shell socket designed for tubes ꞮU 4-pin base. Body is of Grade L-3 ceramic (steatite) ning to MIL specifications. Nickel-plated brass shell; :s are silver-plated phosphor bronze. ach.. **$1.04**

ΚM-50—Heavy-duty, metal-shell socket similar to XM-10; es with jumbo 4-pin base (usually 50-watt types). **$1.38** ach..

CS Crystal Sockets—Ceramic-based sockets for crystal ı. Glazed body; unglazed surface is Dow-Corning 200

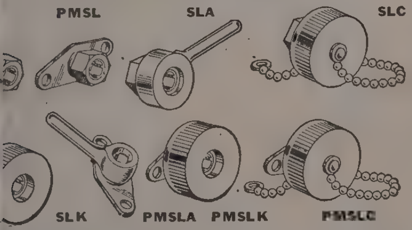
-5—Contacts spaced .500"; pin dia., .125". Phosphor contacts silver plated. Net Each.................. **36c**

-6—Contacts spaced .486"; pin dia., .095". Phosphor contacts silver plated. Net Each.................. **36c**

-7—Contacts spaced .486"; pin dia., .050". Beryllium contacts silver plated. Net Each.................. **36c**

-8—Contacts plated .750"; pin dia., .125". Phosphor contacts silver plated. Net Each.................. **36c**

NEW SHAFTLOCKS

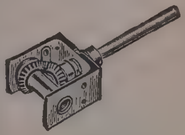


ıl models meet your requirements. Thread-mounted units and lock components provided with ⅜-32 NEF bushings; mounted types intended for components without mounting ıgs. Machined parts are brass with .0005 nickel plate per P-6859. Cast parts are zinc with brass inserts plated .0005 per MIL-P-6859. Retaining chains are brass with .0002 plate; terminate with .140" dia. hole anchor section.

272 (SL)—Threaded shaftlock. Net Each.......... **36c**

No. 14272-2 (PMSL)—Panel-mount shaftlock. Net Each...**45c**
No. 14272-3 (SLA)—Arm type shaftlock. Net Each.......**66c**
No. 14272-4 (SLK)—Knob type shaftlock. Net Each.......**66c**
No. 14272-5 (SLC)—Knob type with retaining chain. Net..**75c**
No. 14272-6 (PMSLA)—Panel-mount, arm type. Net Each..**78c**
No. 14272-7 (PMSLK)—Panel-mount, knob type. Net Each.**78c**
No. 14272-8 (PMSLC)—Panel-mount with chain. Net Ea...**90c**

NEW PRECISION RIGHT ANGLE DRIVE



Intended primarily for remote operation of low torque units such as tuning capacitors or potentiometers. May be used for continuous operation at low speeds with loads up to 50" ounces. Will tolerate intermittent high speed operation (up to 500 rpm) with loads up to 100" ounces. Backlash is less than 1½°. Unloaded running torque less than 2½" ounces. Brass gears; stainless steel shafts and bushings; die cast zinc housing. Size: 4 9/16" long, 61/64" wide; 1 31/32" from rear of housing to top of shaft bushing.

No. PRAD Right Angle Drive—Net Each............ **$11.31**

COIL FORMS

UNIVERSAL CERAMIC FORMS

Five new forms for military and commercial use. Meet MIL specifications. Available with or without collars; terminal collars accept up to four terminals each. Internal, preset torque spring keeps coils tuned as set, even under vibration. Powdered iron cores, color coded to indicate optimum frequency ranges.

Type No.	O. D. In.	Length, In.		Thread		Net Each
		Effec.	Overall	Core	Mounting	
XR-200	.210	19/32	⅞	2-56	8-32 x ¼"	**48c**
XR-250	.265	61/64	1¼	3-48	10-32 x ¼"	**48c**
XR-375	.380	1 9/16	1¾	6-32	¼-28 x ¼"	**50c**
XR-500	.505	1 17/32	2	6-32	¼-28 x ¼"	**53c**
XR-625	.630	2 3/64	2½	6-32	¼-28 x ¼"	**54c**

CERAMIC FORMS

Type XR-60—Ceramic with iron slug. Grooved for #26 wire.
Type XR-61—Same as type XR-60 but with brass slug.
Type XR-62—Ceramic, with iron slug. Winding area, 1¼". Not grooved.
Type XR-63—Same as Type XR-62 but with brass slug.
Types XR-60 through XR-63—Net Each............ **$1.32**

Type XR-70—Meet MIL specifications. Ceramic with iron slug. Grooved for #19 wire. 1 9/16" long, ¾" dia.
Type XR-71—Same as Type XR-70 but with brass slug.
Type XR-72—Same as Type XR-70 but not grooved.
Type XR-73—Same as Type XR-71 but not grooved.
Types XR-70 through XR-73—Net Each............ **$1.32**

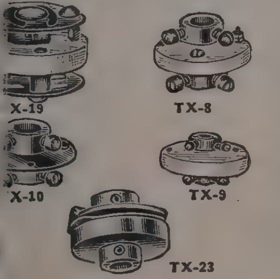
Type XR-80—For high frequency applications, conforms to MIL specifications. Ceramic form; silver-plated brass base; brass core. Two nylon rings supplied to separate coils if more than one is wound on same form. Winding area, ⅝" long x .264" dia.; Overall, 1¼" long x 17/64" dia.
Type XR-81—Same as Type XR-80 but with iron core.
Type XR-82—Same as Type XR-80 except: Winding area, 1" long x .264" dia.; overall ,1¾" long x 17/64" dia.
Type XR-83—Same as Type XR-82 but with iron core.
Types XR-80 through XR-83—Net Each................ **87c**

Type XR-90—For high frequency use; conforms to MIL specifications. Ceramic form; silver-plated brass base; brass core. Two nylon rings supplied to separate coils if two are wound on the same form. Winding area, ⅝" long x .375" dia.; overall, 1¼" long x ⅜" dia.
Type XR-91—Same as Type XR-90 but with iron core.
Type XR-92—Same as Type XR-90 except: Winding area, 1" long x .375" dia.; overall, 1¾" long x ⅜" dia.
Type XR-93—Same as Type XR-92 but with iron core.
Types XR-90 through XR-93—Net Each................ **87c**

MICA-FILLED CERAMIC FORMS

Type XR-50—With iron slug. Winding area, 11/16" long x ½" dia.; overall, 2 3/16" long x 25/32" dia.
Type XR-51—Same as Type XR-50 but with brass slug.
Types XR-50 and XR-51—Net Each................ **$1.04**

SHAFT COUPLINGS



TX-19—A steatite insulated flexible coupling for ¼" shafts. Conservatively rated at 5000 volts peak. Diameter 1⅜", length 1 1/16". Length and flashover voltage can be increased by turning collars outboard. Net Each.......... **$1.44**

TX-8—A non-flexible, completely rigid coupling of very compact design. Fully insulated with ceramic; insulator silicone-treated for longer life. Both hub and spider of nickel-plated brass. Fits ¼" shaft. 1 1/16" dia., 23/32" long. Two 6-32 set screws in each hub. Net Each............ **69c**

TX-10—Extremely compact, fully insulated coupling designed to fit ¼" shafts. Entirely free from backlash. Hub and spiders of nickel-plated solid brass. Canvas bakelite insulation; cadmium-plated steel set screws; nickel-plated brass rivets. 1⅛" dia., 9/16" long. Net Each.. **46c**

TX-22 (Not Ill.)—Similar to TX-10 except non-insulated; all-metal construction. Net Each.................. **46c**

TX-9—Designed for isolating circuits. Extremely small, fully insulated, with high electrical efficiency. Ceramic (steatite) insulation, equal to or better than JAN-1-10. Four brass set screws used to fix shaft; screws at 90° angle. 1⅝" dia., ⅞" long. For ¼" shafts. Net Each. **86c**

TX-23—Deluxe insulated flexible coupling for ¼" shafts. Primarily for radial misalignment up to 1/16"; will also handle up to 2° of angular misalignment. No angular tracking error. Insulated for low voltage. 1" dia., 13/16" long; .252" shaft dia.; 6-32 thread, ⅛" long. Net Each... **$1.55**

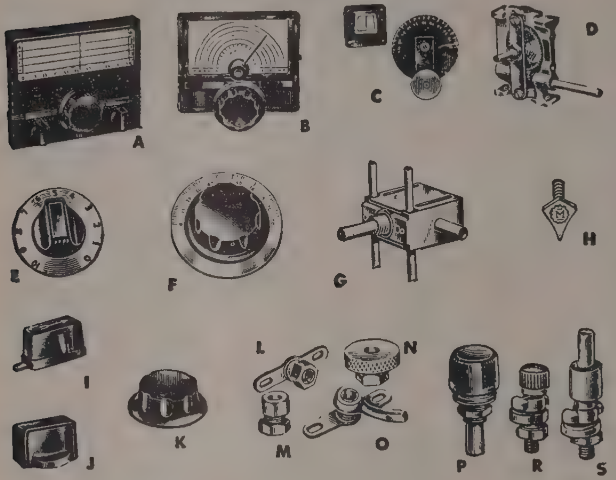
TX-25—Uninsulated version, Net.**$1.55**

TX-24—Same as TX-23 except: Fits 5/32" shaft; 1" dia., 61/64" long; 4-40 thread, 5/16" long. Net Each..................**$1.55**

Dials, Capacitors, Couplings

MILLEN DIALS, VARIABLE CAPACITORS AND COUPLINGS

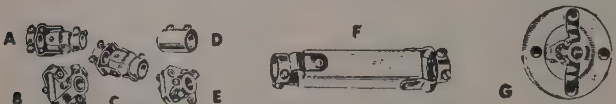
DIALS, DRIVES, SCALES, KNOBS



Millen No.	Description	Figure	Net Each
10000	Worm Drive Unit, either 48:1 or 16:1 (Specify)	D	$9.75
10001	¾" Bar Knob, for ¼" shaft	....	.58*
10002	Instrument Bar Knob, Brass Insert	J	.54*
10002A	Knob and Pointer	....	.69*
10003	Instrument Bar Knob, Navy style, brass insert	I	.54*
10006	Large Tuning Knob, 2¾" dia. with brass insert	K	.75
10007	Nickel Silver Inst. Dial, 1⅝" dia., 10 divisions over 180°, for CW	E	.75*
10008	Nickel Silver Inst. Dial, 3½" dia., 0-100	F	2.40*
10009	Nickel Silver Inst. Dial, 2¾" dia., 0-100	F	1.65*
10011	Disc "Meter" Dial 0-100	C	2.76
10012	Right Angle Gear Drive, 1:1 ratio	G	5.00
10015	1" Dial (180°, CW), for ¼" shaft	....	.72*
10018	Medium Tuning Knob, 1¾" dia., brass insert	K	.54*
10021	Index for use with Dials	H	.21*
10035	Panel Dial, combination. Holes may be readily drilled to add two small controls, as illustrated. Escutcheon removes without disturbing dial mechanism, for easy calibration. Drive ratio 12:1. Escutcheon size, 8½" x 6½"	A	7.26
10039	Midget Panel Dial, 8:1 ratio; 4" x 3¼". Black metal	B	3.24
10050	Dial Lock, Captive Head, front of panel mounting	R	.54*
10053	Dial Lock, sub-panel mounting	S	.60
10060	Shaft Lock, with mounting strap	L	.45*
10061	Shaft Lock, mounting nut for potentiometers, etc.	M	.45*
10062	Shaft Lock, with knurled control knob	N	.54*
10063	Shaft Lock, with lever control	O	.62*
10065	Vernier Drive Unit	P	.81*

*Standard packages of 20 boxes each.

FLEXIBLE COUPLINGS



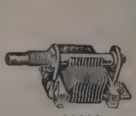
Type 39001 eliminates backlash, yet angle drives with as much as 45° may be obtained. Isolantite insulation. **No. 39005** is non-insulated Universal joint for large angle drives requiring relatively high torque. **No. 39006** for use where shafts have end motion or end wobble. Permits small angle drives. **No. 39002** is conventional type. **No. 39008** is same, with hubs outside. **No. 39009** is large diam. isolantite ring type coupling. **No. 39011** is a high voltage version of 39001. All couplings are standard for ¼" shaft and have slotted head hardened cup point set screws.

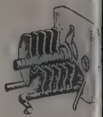
Millen No.	Description (Fig.)	Net Each
39001	Flexible coupling (A)	$0.48*
39002	Conventional cplg. (B)	.48*
39003	Sol. Brass NP cplg. (D)	.24*
39005	Univ., non-insul. (C)	.48*
39004	39005, hubs "in" (C)	.48*
39006	Slide action, steatite (E)	.48*
39008	39002 hubs, "out" (C)	.69*
39009	Hi-V. ring type (G)	.75*
39011	Hi-V. flexible type (F)	1.35

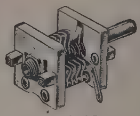
*Standard packages of 20 boxes each.

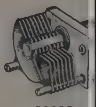
408-59A

SMALL VARIABLE AIR CAPACITORS


19000


20000


21000


22000

Small variable air dielectric receivin capacitors employing brass plates solder type construction heavily Highest grade wax impregnated s end plates. Standard plain bearings.

19000 SERIES

Millen No.	Description	Cap. $\mu\mu f$	
19025	Open Frame Midgets, Single Spaced	25	$
19035		35	
19050		50	
19075		75	
19100		100	
19140		140	
19200		200	
19935	Open Frame Midgets, Double Spaced	35	
19950		50	

20000 SERIES

Millen No.	Description	Cap. $\mu\mu f$	
20015	Steatite Ultra Midgets, Single Spaced	15	$
20025		25	
20050		50	
20075		75	
20100		100	
20920	As above, but Double Spaced	20	
20935		35	

21000 SERIES

Millen No.	Description	Cap. $\mu\mu f$	
21050	Steatite Ultra Midgets, Single Spaced	50	$
21100		100	
21140		140	
21935	Double Spaced	35	

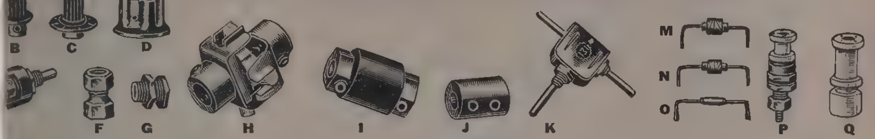
22000 SERIES

Millen No.	Description	Cap. $\mu\mu f$	
22035	Steatite Midgets, Single Spaced	35	$
22050		50	
22075		75	
22100		100	
22140		140	
22915	Same as above but Single Spaced	15	
22935		35	

WE CAN SUPPLY THE CO
PLETE LINE OF MILLEN EQU
MENT AND COMPONEN
DON'T HESITATE TO INQU
ABOUT UNLISTED ITEMS

pecial Electronic Components

MILLEN MINIATURIZED COMPONENTS

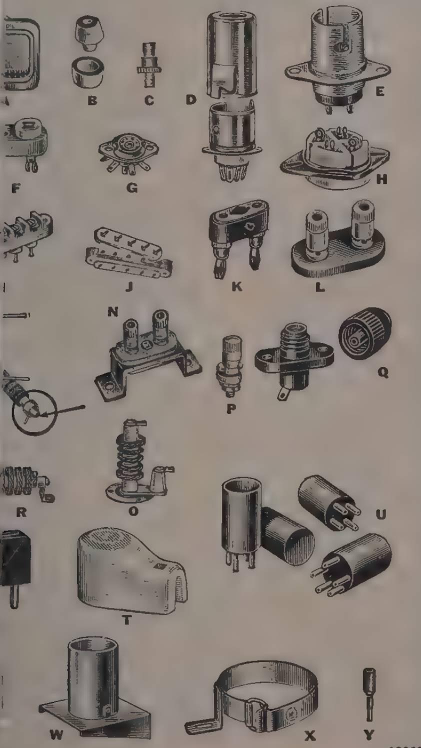


ed for use in Millen equipment such as the 90901 Oscillo- hese components are now available for separate sale. t these parts are similar in most details except size with uivalents in Millen standard component parts, and in levices where complete miniaturization is not paramount, nation of standard and miniature components may pos- used to advantage. Additional miniature and subminiature ents are being designed and will be announced.

Fig.	Description	Net Each
D	Matches standard knobs in style. Black plastic; brass insert; for ⅛″ shaft. Overall height ½″. Diameter ¾″	$0.58
C	¼″ diameter black plastic knob with ⅝″ plastic dial with 5 index lines. Brass insert for ⅛″ shaft. Overall height ⅝″; Screwdriver slot in top	.42
K	Right angle drive. ⅛″ diameter shafts. Single hole mounting bushing ¼″-32 dia.	3.90
B	Similar to A019 except with ⅜″ skirt.	.39
A	Similar to A007 but without flange	.36
F	Shaft lock for ⅛″ shaft. ¼″-32 bushing. Nickel-plated brass	.39
G	Shaft bearing for ⅛″ shafts. Nickel-plated brass. Fits 17/64″ hole	.36

Millen No.	Fig.	Description	Net Each
E001	L	Steatite standoff or tie-point integral mounting eyelet. .205″ overall diameter. Box of five	$ .90
J300-25	O	Iron core RF choke, 25 μh	.42
J300-50	O	Iron core RF choke, 50 μh	.42
J300-100	O	Iron core RF choke, 100 μh	.42
J300-250	O	Iron core RF choke, 250 μh	.42
J300-500	O	Iron core RF choke, 500 μh	.42
J300-1000	N	Iron core RF choke, 1000 μh	.42
J300-2500	M	Iron core RF choke, 2500 μh	.42
M003	J	Solid coupling for ⅛″ diameter shaft. Nickel-plated brass	.33
M006	H	Universal joint style flexible coupling. Spring finger; steatite insulation; nickel-plated brass for ⅛″ diameter shafts	.75
M008	I	Insulated coupling with nickel-plated brass inserts for ⅛″ diameter shafts	.51
M023	E	Insulated shaft extension for mounting subminiature pot with ⅛″ shaft and ¼″-32 bushing	1.44
69043	Q	Steatite coil form; adjustable core. Top tuned. Tapped 4-40 hole for mounting. Winding space ¼″ diameter x 13/32″ lgth.	.84
[illegible]	P	Steatite coil form, adjustable brass core. Bottom tuned. Mounts by No. 10-32 brass base. Winding space .187″ diameter x 3/16″ length	.84

MILLEN STANDARD COMPONENTS

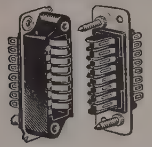


Millen No.	Fig.	Description	Net Each
80075	A	5″ CRT bezel, satin black plastic	$8.40
80073	A	3″ CRT bezel, satin black plastic	4.35
80072	A	2″ CRT bezel, satin black plastic	1.80
80071	A	1″ CRT bezel, satin black plastic	1.50
32103	B	Steatite bushing for ¾″ hole	.51
32150	C	Isol. thru-bushing for ¼″ hole†	.30*
33307	D	Socket, Midget 9000 series with shield	.75*
33991	E	Dual contact bayonet socket for 991	.51*
33002	F	Xtal socket, ¾″ spacing, .125 pins	.36*
33102	F	Xtal socket, ½″ spacing, .125 pins	.36*
33202	F	Xtal socket, ½″ spacing, .095 pins	.36*
33302	..	Xtal socket for CR-7, .487 spacing, .05 pins.	.24*
33407	G	Socket, midget 9000 series, less shield	.51*
33004	H	Tube socket, 4-prong	.45*
33005	H	Tube socket, 5-prong	.45*
33006	H	Tube socket, 6-prong	.45*
33008	H	Tube socket, 8-prong	.45*
37302	I	Two terminal, steatite	.75*
37303	I	Three terminal, steatite	.84*
37304	I	Four terminal, steatite	.96*
37305	I	Five terminal, steatite	1.14*
37306	I	Six terminal, steatite	1.23*
40305	J	Coil form plug, intermediate size	.69
41305	J	Coil form socket, intermediate size	.84
37212	K	Black or red low loss dual plug	.78*
37201	V	Red or brown steatite discs, pair	.24*
37202	L	Steatite or low loss plates, pair	.39*
37202	L	Black and red plates, pair	.39*
37222	L	Binding posts, nickel-plated	.30*
37211	N	Bracket, nickel-plated brass	.21*
34154	O	Choke, air core, 1 mh, 600 ma, amateur	1.95
34100	M	RF choke, 2.5 mh, 250 ma	.48*
34140	R	Universal air core transmitting choke	1.14
10050	P	Dial lock, single-hole mounted	.54*
37001	Q	Black bakelite safety terminal	.45*
37001	Q	Red bakelite safety terminal	.48*
37412	S	Transmission line plug for 300 ohm line	.24*
36001	T	Ceramic plate or grid cap, 9/16″	.24*
36002	T	Ceramic plate or grid cap, ⅜″	.24*
36004	T	Ceramic plate or grid cap, ¼″	.24*
45000	U	1″ mica base coil form, no prongs	.39*
45004	U	1″ mica base coil form, 4 prongs	.51*
45005	U	1″ mica base coil form, 5 prongs	.51*
80009	W	Shield, shelf and socket for 807 tube	1.05
33087	X	Tube base clamp. Specify base diameter	.36
39023	Y	High voltage insulated shaft extension, non-locking	1.35
39024	Y	Same as 39023, locking type	1.65

*Standard packages of 20 boxes each. †In box of 5.

AMPHENOL Special Connectors

BLUE RIBBON SERIES



Provides quick disconnect for sub-assemblies with low insertion and withdrawal force requirements. Plug easily when visual alignment is impossible. Almost any desired combination of circuit rerouting possible with single connectors or multiple connectors mounted in a single frame. No contact pins to break or bend. Contacts supported for their full length on rugged, high quality dielectric. Receptacle spring contacts are below-surface mounted. Wiping action assures positive contact at all times. Contact terminals accommodate up to No. 16 stranded conductors. Contacts have heavy silver base plating with gold surface finish. Positive polarization, protective barriers insure proper spacing.
Voltage Rating: 5 amps. 600 v. DC at sea level; 150 v. DC at 60,000 feet.

BARRIER POLARIZATION TYPES

Amphenol No.	Contacts	Type	Net* 1-9
26-182	8	Male	$1.04
26-4100-8P	8		.98
26-4100-16P	16		1.82
26-4100-24P	24		2.18
26-4100-32P	32		2.56
26-183	8	Female	1.67
26-4200-8S	8		1.60
26-4200-16S	16		2.31
26-4200-24S	24		2.78
26-4200-32S	32		3.27

PIN POLARIZATION TYPES

26-159-16	16	Male	$1.98
26-159-24	24		2.38
26-159-32	32		2.80
26-190-16	16	Female	2.47
26-190-24	24		2.98
26-190-32	32		3.51

BARRIER POLARIZATION TYPES WITH KEYED SHELLS

26-4101-8P	8	Male	$1.92
26-4101-16P	16		2.88
26-4101-24P	24		3.33
26-4101-32P	32		3.82
26-4201-8S	8	Female	2.20
26-4201-16S	16		3.00
26-4201-24S	24		3.58
26-4201-32S	32		4.18

BARRIER POLARIZATION TYPES WITH KEYED LATCH-LOCK SHELLS

Available in alternate positions of shell keying on special order. Write for catalog showing all shell key positions. Units (male and female) intermate with each other cable to chassis only.

Cable Type-End Outlet

26-4301-8P	8	Male	$4.93
26-4301-16P	16		6.18
26-4301-24P	24		6.93
26-4301-32P	32		7.71
26-4301-8S	8	Female	5.56
26-4301-16S	16		6.66
26-4301-24S	24		7.53
26-4301-32S	32		8.43

Cable Type-Side Outlet

26-4501-8P	8	Male	$4.93
26-4501-16P	16		6.18
26-4501-24P	24		6.93
26-4501-32P	32		7.71
26-4501-8S	8	Female	5.56
26-4501-16S	16		6.66
26-4501-24S	24		7.53
26-4501-32S	32		8.43

Chassis Type

26-4401-8P	8	Male	$2.98
26-4401-16P	16		3.94
26-4401-24P	24		4.40
26-4401-32P	32		4.89
26-4401-8S	8	Female	3.60
26-4401-16S	16		4.42
26-4401-24S	24		5.00
26-4401-32S	32		5.60

***Additional 25% discount on quantities of 10-49.**

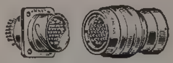
MICRO-RIBBON MINIATURE BLUE RIBBON CONNECTORS

All the rugged features of the standard Blue Ribbon Series, plus miniature size. Up to 80% smaller, 60% lighter, yet full size electrical performance. Cadmium plated clear chromate seal brass shells. Takes wire up to #22. Rated 5 amps, 600 v. DC.

Amphenol No.	Type	Contacts	Net* 1-9
57-10140	Plug	14	$1.71
57-20140	Socket	14	1.76
57-30140	Cable Plug	14	2.82
57-40140	Chassis Socket	14	2.11
57-10240	Plug	24	2.27
57-20240	Socket	24	2.29
57-30240	Cable Plug	24	3.15
57-40240	Chassis Socket	24	2.53
57-10360	Plug	36	2.60
57-20360	Socket	36	2.62
57-30360	Cable Plug	36	3.44
57-40360	Chassis Socket	36	2.71
57-10500	Plug	50	3.33
57-20500	Socket	50	3.40
57-30500	Cable Plug	50	4.24
57-40500	Chassis Socket	50	3.51

***Additional 25% discount on quantities of 10-49.**

SERIES 67 "MINNI-E" MINIATURE CABLE CONNECTORS



Quick disconnect, multi-contact miniature bayonet lock types meet fully the "E" requirements of MIL-C-5015C specifications governing A-N (MS) connectors. Sealed with unitized back for moisture resistance. Spring-loaded coupling for positive locking; stainless steel bayonet slots and pins for long wear; visual engagement indicator. Unaffected by altitude, moisture or test prod damage. Shell types correspond to AN nomenclature. Available in a variety of insert or contact arrangements as plugs, cable and panel receptacles and single hole mounting receptacles. Operating temperature: −55° C to +125° C. Nominal rating: 7.5 amps for #20 contact; 17.0 amps for #16 contact.

CABLE TO CABLE RECEPTACLES

Amphenol Number	With	Size, Inches O.D. x Length
67-01P12	Form for potting seal	.875 x 1.668
67-01P14		.982 x 1.668
67-01P18		1.232 x 1.668
67-01P20		1.375 x 1.668
67-01P22		1.468 x 1.735
67-01E12	Grommet for individual wire seal	.875 x 1.690
67-01E14		.982 x 1.690
67-01E18		1.232 x 1 690
67-01E20		1.375 x 1.690
67-01E22		1.468 x 1.750

PANEL MOUNT RECEPTACLES

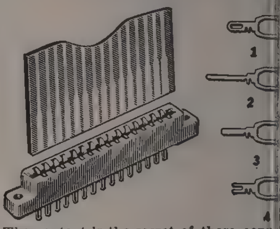
67-02E12	Standard 4-hole panel mount	.687 x .828
67-02E14		.812 x .828
67-02E18		1.062 x .828
67-02E20		1.187 x .828
67-02E22		1.281 x .937
67-03E12	Rear mount round flange for single hole	1.031 x .828
67-03E14		1.156 x .828
67-03E18		1.406 x .828
67-03E20		1.531 x .828
67-03E22		1.656 x .937

PLUGS

67-06P12	Form for potting seal	.937 x 1.668
67-06P14		1.062 x 1.668
67-06P18		1.352 x 1.668
67-06P20		1.475 x 1.668
67-06P22		1.606 x 1.735
67-06E12	Grommet for individual wire seal	.937 x 1.690
67-06E14		1.062 x 1.690
67-06E18		1.352 x 1.690
67-06E20		1.475 x 1.690
67-06E22		1.606 x 1.750

Write for prices and listing of inserts available.

PRINTED CIRCUIT CONNECTO
143 SERIES



The contact is the secret of these conn tors' effectiveness; can't be overstressed will form-fit any standard .055" to .0 board, even after repeated insertions. cellent wiping, on boards of varying thi ness, yet will not score or damage boar Long contact life—countless insertic without contact fatigue. Low MV drop 5 mv at 2 amps. Contacts can't be Dielectric Prin-Cir connectors are mol of a material of superior physical and el trical properties: High impact and ten strength; excellent mechanical stabil high dielectric strength; high arc res ance; low moisture absorption.

Four Contact Styles

-01—Standard eyelet to accommodate to three #20 ga. wires.
-02—Wire wrap tail for standard w wrap devices.
-03—Pin type tail for dip soldering other boards.
-04—Open end type tail to facili standard wiring.

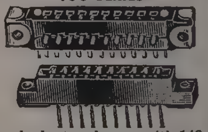
Additional Features: Contact coding top and bottom; automatic printed bo alignment; available with one or m polarizing keys in any contact locat When ordering, number indicates exa what is desired: Example—143-010 1001 indicates 143 Series, 10 contacts, contact style, polarizing key in first c tact location. All models: .333" card in tion depth; .082" slot width; .458" b depth; .340" base width; .128" dia. mo ing holes.

Standard—01 Contact

Amph. No.	Contacts	Ovrl. Lgth.	Mtg. Ctrs.	Slot Lgth.
143-006	6	1.785	1.531	1.097
143-010	10	2.410	2.156	1.723
143-012	12	2.722	2.468	2.035
143-015	15	3.191	2.937	2.504
143-018	18	3.660	3.406	2.972
143-022	22	4.285	4.031	3.597

***Additional 25% discount on quanti of 10-49.**

133 SERIES



Plugs and adapters for use with 143 Se Printed Circuit Connectors. Molded di phthalate body, cadmium plated b guide pins, cadmium plated brass end and gold over albaloz plated brass tacts. Rated 2300 v. rms average, at level; current rating in excess of any pr ed wiring board requirement. Polarity tained by omitting a contact and usi keyed female 143 Series connector. A able with 10, 15, 18 or 22 contacts in 5 tact tail types.

Five Tail Contact Types

-33—Pin Tails, top and side mount.
-13—Pin Tails, top mount.
-21—Double Tail, solder type.
-03—Single Side Mount, pin type.
-23—Double Side Mount, pin type.

Stock Number Identification: No. 022-21-1001 indicates 133 Series, 22 tacts, 21 contact tail (double tail, so type), and polarizing omitted contac first contact location.

Amphenol No.	Contacts	Net* 1
133-010-21	10	$2.4
133-015-21	15	3.0
133-018-21	18	3.3
133-022-21	22	3.7

***Additional 25% discount on quant of 10-49.**

PHENOL Special Connectors

SERIES 27 INAX RF CONNECTORS

ture connectors of 50 and 75 ohm e. Full-size electrical character- small design. Available in both and push-on types. 50 and 75 ohm s and push-on and screw-on con- o not mate. All parts machined ept working parts, which are ss. Electro-gold finish. Beryllium male contacts; brass male con- shed in electro-gold brass. **Write lete Series 27 listing.**

ype	Description	Amph. Cable	Net§ 1-9
	Plug	21-598	$0.99
	Jack	21-598	.99
50 hm ush- on	Receptacle	....	1.01
	Jack, Blkhd.	21-598	1.17
	Adpt. Blkhd.	....	1.59
	Plug, Rt. angle	21-598	2.99
	Receptacle	....	2.83
	Terminator	21-598	.65
	Plug	21-598	.88
	Jack	21-598	.94
	Receptacle	....	1.01
50 hm crew on	Jack, Blkhd.	21-598	1.07
	Adpt. Blkhd.	....	1.74
	Receptacle	....	2.37
	Plug, Rt. Angle	21-598	2.55
	Submin. Adpt.	....	3.17
	Recept., P-C	....	.78
	Plug	21-597	1.20
75 hm ush- on	Jack	21-597	1.20
	Receptacle	....	1.20
	Jack, Blkhd.	21-597	1.59
	Feed Thru	....	1.66
	Plug, Rt. Angle	21-597	3.22
	Plug	21-597	1.12
	Jack	21-597	1.07
75 hm crew on	Receptacle	....	1.17
	Jack, Blkhd.	21-597	1.43
	Adpt. Blkhd.	....	1.72
	Receptacle	....	2.60
	Plug, Rt. Angle	21-597	2.78

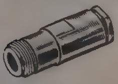
227-900 Crimping Tool. †Use No. rimping Tool. #Use No. 227-901 Tool. ‡Hermetic. **al 25% discount on quantities**

l No. 227-900 Crimp- —Net Each **$17.00**

l No. 227-901 Crimp- —Net Each **$17.00**

l No. 227-902—Set of 27-13 and 27-14. Net Ea. **$1.00**

PTIVATED CONTACT RF CONNECTORS



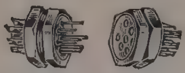
nectors feature contacts that are within the structure of the con- elf. This provides increased reli- nder rapid changes in environ- onditions, imposed mechanical nd the relief of inherent cable Display the same voltage ratings ng characteristics as the standard and HN Series, using the same mps, cap and chains. For RG/U 9, 10, 87A, 115, 115A. Dielectric Teflon.

mph. No.	Size, In. O.D.	Size, In. I.D.	Size, In. Lgth.	Wt., Lbs.
2-312	¾	41/64	1½	.114
2-313	¾	41/64	1 9/16	.109
2-314	¾	41/64	1 9/16	.125
2-320	.....	49/64	2¾	.182
2-321	.....	49/64	2⅞	.167
2-324	.....	49/64	2⅞	.189

Military No.	Description	Net* 1-9
UG-1185/U	Plug	$2.51
UG-1186/U	Jack	2.15
UG-1187/U	Panel Jack	2.29
UG-1213/U	Plug	4.44
UG-1214/U	Jack	5.00
UG-1215/U	Panel Jack	5.22

al 25% discount on quantities

MINIATURE HEXAGON CONNECTORS



Unlimited applications in interconnection of miniature electronic equipment. Interchangeable hardware and contacts. Body of molded 1-501 dielectric; gold plated contacts; nickel plated brass hardware. Rated 7.5 amps, 500 v. rms at sea level.

WITH HEX NUT

Amphenol No.	Description	Net* 1-9
126-010	5-pin plug	$0.78
126-011	5-pin socket	1.22
126-191	7-pin plug	1.16
126-192	7-pin socket	1.74
126-012	9-pin plug	1.00
126-013	9-pin socket	2.11

WITH LOCKING CLIP

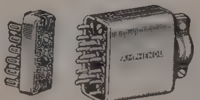
Amphenol No.	Description	Net* 1-9
126-214	4-pin plug	$0.98
126-216	5-pin plug	.84
126-218	5-pin socket	1.29
126-197	7-pin plug	1.00
126-198	7-pin socket	1.77
126-219	9-pin plug	1.06
126-221	9-pin socket	2.16

WITH HOOD AND CLAMP

Amphenol No.	Description	Net* 1-9
126-215	4-pin socket	$1.60
126-217	5-pin plug	1.41
126-223	5-pin socket	1.83
126-195	7-pin plug	1.55
126-196	7-pin socket	2.34
126-220	9-pin plug	1.62
126-222	9-pin socket	2.70

***Additional 25% discount on quantities of 10-49.**

RACK AND PANEL CONNECTORS
126 SERIES



11, 15 and 20 contact connectors for use on rack and panel mountings. All have eyelets inserted in the mounting holes for added strength, holes for wiring instead of the usual hooks on the male contacts, and interlocking barriers to prevent accidental shorting. All models can be supplied with or without a protective can and cable clamp as shown. Molded of mica-filled phenolic. Male contacts are brass, silver plated and molded into the insert. Female contacts are berylium copper, silver plated. **Voltage Rating:** 500 volts rms, 60 cps at sea level.

SPECIFICATIONS

Amphenol No. 126-	Description	Contacts No. 16	Contacts No. 20	Spacing
804,809	Male	2	9	.864
805,808	Female	2	9	.864
151,152	Male	3	12	1.188
150,153	Female	3	12	1.188
806,811	Male	4	16	1.620
807,810	Female	4	16	1.620
812	Female	20	......	.....
813	Male	20	......	.....

SERIES 126 PRICES

Amphenol No.	No. of Contacts	Mounting Screw Size	Net§ 1-9
126-804*	11	No. 4	$1.06
126-809	11	No. 4	1.68
126-805*	11	No. 4	.84
126-808	11	No. 4	1.44
126-151*	15	No. 6	1.29
126-152	15	No. 6	1.95
126-150*	15	No. 6	.89
126-153	15	No. 6	1.55
126-806*	20	No. 4	1.83
126-811	20	No. 4	2.61
126-807*	20	No. 4	1.50
126-810	20	No. 4	2.28
126-812*	20	No. 4	1.50
126-813*	20	No. 4	2.67

*Insert only, without shell and clamp.
§Additional 25% discount on quantities of 10-49.

MINIATURE "AN" TYPE CONNECTORS—165 SERIES

Compact, efficient units for a multitude of uses; perfect for aircraft instrumentation. Available in alternate insert positions for gang mounting. Pressure-proof and waterproof; withstand government salt spray tests for many excess hours. Female units are sandwich construction with insert spun into cartridge and connector sealed. Plugs available with either built-in cable clamp or specially made for potting the back. Efficient "O" ring is used for both plug and receptacle as a sealer. Aluminum shell; Amphenol Blue dielectric; gold plating over silver on bronze contacts. Weight, approx. ⅛ of standard AN connectors. Two sizes: **Small:** For 5, 9, or 12 contacts 20 AWG. Panel receptacle mounts in 13/16" hole; flange is 1 1/16" square. Cable receptacle 1¾" long, ⅞" O.D. Plug 2 3/64" long, ⅜" dia. cable opening. **Large:** For 11, 14 and 24 contacts, 16 and 20 AWG. Panel receptacle fits 1 1/16" hole; flange 1 5/16" square. Cable receptacle 1¾" long, 1⅛" O.D. Plug is 2 3/64" long, takes 11/32" dia. cable. **8 and 19 contact arrangements available.**

SMALL SHELL

5 Contacts No. 20 AWG—Rated 7.5 amps, 600 v. rms at sea level.

Amph. No. 165-	Description	Net Each
33	Male Plug	$3.26
34	Female Plug	4.46
35	Male Recept.	2.34
36	Female Recept.	2.82
33-1000	Male Plug, Potting	2.30
34-1000	Female Plug, Potting	2.92
35-1000	Male Recept., Potting	3.96
36-1000	Female Recept., Potting	5.76

9 Contacts for No. 20 AWG—Rated 7.5 amps, 500 v. rms at sea level.

Amph. No. 165-	Description	Net Each
13	Male Plug	$3.42
14	Female Plug	5.26
15	Male Recept.	2.52
16	Female Recept.	3.24
13-1000	Male Plug, Potting	2.54
14-1000	Female Plug, Potting	3.56
15-1000	Male Recept., Potting	4.19
16-1000	Female Recept., Potting	5.21

12 Contacts for No. 20 AWG—Rated 7.5 amps, 500 v. rms at sea level.

Amph. No. 165-	Description	Net Each
9	Male Plug	$3.61
10	Female Plug	5.36
11	Male Recept.	2.71
12	Female Recept.	4.44
9-1000	Male Plug, Potting	2.77
10-1000	Female Plug, Potting	5.14
11-1000	Male Recept., Potting	4.44
12-1000	Female Recept., Potting	6.78

LARGE SHELL

7 Contacts for No. 20 AWG (7.5 amps) and **4 Contacts for No. 16 AWG** (17 amps) —500 v. rms at sea level.

Amph. No. 165-	Description	Net Each
17	Male Plug	$4.78
18	Female Plug	5.85
19	Male Recept.	3.02
20	Female Recept.	4.07
17-1000	Male Plug, Potting	3.16
18-1000	Female Plug, Potting	4.54
19-1000	Male Recept., Potting	4.89
20-1000	Female Recept., Potting	6.35

14 Contacts for No. 16 AWG—Rated 17 amps, 500 v. rms at sea level.

Amph. No. 165-	Description	Net Each
29	Male Plug	$4.88
30	Female Plug	6.78
31	Male Recept.	3.14
32	Female Recept.	5.01
29-1000	Male Plug, Potting	3.32
30-1000	Female Plug, Potting	5.86
31-1000	Male Recept., Potting	5.04
32-1000	Female Recept., Potting	7.60

24 Contacts for No. 20 AWG—Rated 7.5 amps, 500 v. rms at sea level.

Amph. No. 165-	Description	Net Each
25	Male Plug	$5.66
26	Female Plug	7.43
27	Male Recept.	3.91
28	Female Recept.	5.66
25-1000	Male Plug, Potting	4.34
26-1000	Female Plug, Potting	6.71
27-1000	Male Recept., Potting	6.08
28-1000	Female Recept., Potting	10.39

AMPHENOL Cable & Mike Connector

TYPE BNC CONNECTORS

31-008

31-009

31-005

31-002

31-003

Type BNC Connectors incorporate quick connect and disconnect plus weatherproof features. Small, lightweight, low voltage types for use with small RF cables. Not constant impedance but produce very little discontinuity with 50 ohm coaxial cable.

50 Ohm For RG-55, 58, 58A/U Cables

Amph. No.	MIL No.	Description	Net* 1-9
31-002	UG-88/U	Weatherproof plug	$1.11
31-001	UG-291/U	Panel Jack	1.27
31-005	UG-89/U	Weatherproof Jack	1.20
31-003	UG-290/U	Receptacle	1.02
31-817	UG-447/U	Same as 31-003 except threaded.	1.11
31-016	UG-254A/U	Pressurized receptacle	3.15
31-102	UG-657/U	Receptacle, pressurized bulkhead	1.64
31-008	UG-274/U	Tee Adapter	2.82
31-009	UG-306/U	Right angle adapter	2.62
31-017	CW-159/U	Shorting plug with chain	.93
31-006	CW-123/U	Cap and chain for receptacles	.51
31-007	CW-155/U	Cap, without chain	.36

70 Ohm for RG-59, 62, 71/U

Amph. No.	MIL No.	Description	Net* 1-9
31-012	UG-260/U	Weatherproof plug	$1.18
31-011	UG-262/U	Weatherproof panel jack	1.29
31-015	UG-261/U	Weatherproof jack	1.24

TYPE BN CONNECTORS

Type BN Connectors, electrically similar to BNC. Use in video, trigger-pulse and low RF applications, not recommended for frequencies in excess of 200mc and 250v max. Use only on inside equipment and for replacement purposes.

For RG-55, 58, 58A, 59, 62, 71/U Cables

Amph. No.	MIL No.	Description	Net* 1-9
82-21	UG-85/U	Plug	$2.20
82-25	UG-114/U	Panel jack	2.75
82-26	UG-115/U	Jack	2.51
82-42	UG-87/U	Receptacle	2.06
31-101	UG-206/U	Bulkhead receptacle	3.35
31-759	....	Shield grounding lug for 31-101	.10

TYPE N CONNECTORS

82-24

82-64

82-86

82-88

82-36

Type N Connectors are the most popular constant impedance connectors for medium size cables such as RG-8/U. Weatherproof. Useful up through microwave frequencies. May be used with 75 ohm cables with little impedance discontinuity.

50 Ohm For RG-8, 9, 9A, 10, 87A, 115 U and Other Cables

Amph. No.	MIL No.	Description	Net* 1-9
82-61	UG-21B/U	Plug with teflon insulator	$1.91
82-96	UG-21C/U	Air Force version of 82-61	2.13
82-104	UG-167A/U	Plug for RG-17, 18/U teflon ins.	5.46
82-105	UG-204A/U	Plug for RG-14/U	4.00
82-835	....	Angle plug with teflon insulator.	5.06
82-62	UG-22B/U	Panel jack with teflon insulator.	1.80
82-95	UG-22C/U	Air Force version of 82-62	1.89
82-63	UG-23B/U	Jack with teflon insulator	1.75
82-94	UG-23C/U	Air Force version of 82-63	1.75
82-67	UG-160A/U	Bulkhead jack with teflon insul.	2.60
82-93	UG-160B/U	Air Force version of 82-67	2.40
82-48	MX-564/U	Armor clamp for RG-10 & 12/U	.84
82-24	UG-58/U	Receptacle with teflon insulator.	1.22
82-97	UG-58A/U	Receptacle with teflon insulator.	1.20
83-1H	UG-106/U	Hood for panel receptacles	.27
82-66	UG-30/U	Adapter pressurized bulkhead	3.06
82-100	UG-57B/U	Adapter, straight	2.86
82-65	UG-29A/U	Adapter, straight	2.09
82-101	UG-29B/U	Adapter, straight	1.98
82-36	UG-107A/U	Tee adapter with teflon insulator	5.55
82-102	UG-107B/U	Tee adapter with teflon insulator	4.28
82-99	UG-28A/U	Tee adapter with female ends, Tef.	3.89
82-106	MX-913/U	Cap and chain for receptacles	.62

50 Ohm For RG-5, 5A, 21/U, also with 6/U

Amph. No.	MIL No.	Description	Net* 1-9
82-86	UG-18B/U	Plug with teflon insulator	$2.15
82-87	UG-19B/U	Panel jack with teflon insulator.	2.15
82-88	UG-20B/U	Jack with teflon insulator	1.93

70 Ohm For RG-11, 12, 13/U

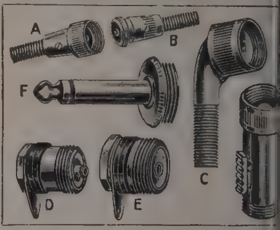
Amph. No.	MIL No.	Description	Net* 1-9
82-84	UG-94A/U	Plug with teflon insulator	$2.24
82-90	UG-96A/U	Panel jack with teflon insulator.	2.86
82-89	UG-95A/U	Jack with teflon insulator	2.09

***ADDITIONAL 25% DISCOUNT IN QUANTITIES OF 10-49.**

MICROPHONE CONNECTORS

PRESSURE TYPE

In the 75 Series, plugs mate all cable jacks and receptacles. Pressure contacts spring actuated. Circuit closing contacts same except that they close circuit when plug is disengaged. Mounts in .385″ hole grounded to chassis, ½″ hole, ungrounded.



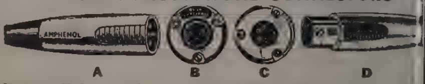
Amphenol No.	Figure	Description	Net† 1
75-PC1M	E	Non-Short.	$0.2
75-CL-PC1M	D	Closed Circuit	.3
75-MC1P	F	Phone Plug Ad.	.3
75-CCC1	....	Cap and Chain	.2
75-MC1S	G	Mike Switch	1.1
75-MC1F-A	C	Angle Plug	.6
75-MC1F	A	Straight Plug	.3
75-MC1M	B	Cable Jack	.2
75-1	‡	Female Connector	.3
75-2	‡	Male Connector	.2
75-3	‡	Chassis Connector	.2

‡Miniature: 1¹¹⁄₆₄″ lg., female; 1″ lg., male; ⅝″ lg. chassis.

MICROPHONE CONNECTORS—1, 2, 3, 4 CONT

Amphenol No.	Description	Contacts	Net†
80M	Male Plug	1	$0.
80F	Female Cable Jack	1	
80C	Female Chassis Receptacle	1	
80-MC2M	Male Plug	2	
80-MC2F	Female Cable Jack	2	
80-PC2F	Female Chassis Receptacle	2	
91-MC3M	Male Plug	3	
91-MC3F	Female Cable Jack	3	
91-PC3F	Female Chassis Receptacle	3	
91-MC4M	Male Plug	4	
91-MC4F	Female Cable Jack	4	
91-PC4F	Female Chassis Receptacle	4	

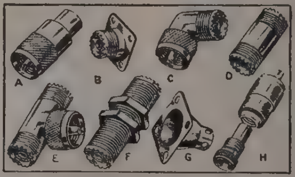
QWIK MICROPHONE CONNECTORS



Extra efficient male or female plugs or receptacles; 3 or 4 contacts. Zinc alloy shells; Amph. blue dielectric 1-501 inserts; gold plated contacts; corrosion resistant nickel finish. Four contacts, except (‡), 3 contacts.

Amph. No.	Fig.	Description	
91-853	A‡	Male Plug	$
91-854	D‡	Female Plug	
91-855	C‡	Male Receptacle	
91-856	B‡	Female Recept.	
91-857	A	Male Plug	
91-858	D	Female Plug	
91-859	C	Male Recept.	
91-860	B	Female Recept.	

†OTHER DISCOUNTS ON 50-149 AND 150-249 QUANT



UHF 83 SE COAXIA CONNECT

Amphenol Low RF Connec Adapters and T nations have especially des for use with C and Twin Co Cable similar t phenol RG-/U

Amph. No.	Fig.	Description	
83-1SP	A	Plug for small and medium sized cable.	$
83-168	H	Reducing adapter for RG-59, 62, 71/U.	
83-185	H	Reducing adapter for RG-58/U	
83-776	A	Plug for RG-29, 55, 59, 62, 71/U	
83-1R	B	Receptacle, mica filled insert	
83-1H	G	Hood for RG-8, 10, 11, 12, 13, 63, 65/U	
83-1HP	G	Hood, as above	
83-1T	E	Adapter, Tee	
83-1AP	C	Right angle adapter	
83-1J	D	Adapter, straight	
83-1F	F	Adapter, bulkhead	
TWIN COAXIAL CONNECTORS			
83-22SP	A	Straight plug for RG-22/U	$
83-22R	B	Chassis or box type receptacle	
83-22AP	C	Right angle adapter	
83-22J	D	Adapter; straight	
83-22F	F	Adapter, bulkhead	
83-22T	E	Adapter, Tee	

***ADDITIONAL 25% DISCOUNT IN QUANTITIES OF**

ckets and Connectors

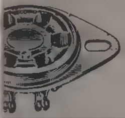
AMPHENOL SOCKETS AND CONNECTORS

BETWEEN SERIES ADAPTERS

RF connector series. Non-constant impedance; deinimize electrical discontinuity.

Military No.	Mates With	Net Ea.
UG-201/U	N female and BNC male	$2.66
UG-201A/U	N female and BNC male	2.84
UG-273/U	BNC male and UHF 49194 or equivalent	1.93
UG-349A/U	N male and BNC female	2.80
UG-564/U	C male and N female	2.91
UG-565A/U	C female and N male	4.68

REPLACEMENT SOCKETS



Consists of regular "S" type sockets assembled with retainer rings in sturdy nickel plated steel mounting rings. Use these sockets to replace broken and noisy wafer types. Either black phenolic or low-loss mica-filled. Mounting plate has slotted holes to fit centers from 1½" to 1⅞".

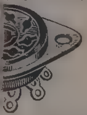
Black Phenolic		Mica-Filled Phenolic	
Amphenol No.	Net Each*	Amphenol No.	Net Each*
78-RS4	12c	....	....
78-RS5	13c	....	....
78-RS6	14c	....	....
78-RS7L	19c	....	....
78-RS7S	14c	....	....
78-RS8	13c	78-RS8T	17c
78-RS8L	18c	....	....
78-RS9	14c	....	....
78-RS11	17c	78-RS11T	20c

STEATITE REPLACEMENT SOCKETS

apts to any application. Assembled with retainer ring plated steel mounting plate. Slotted mounting holes fit from 1½" to 1⅞". Requires 1¼" hole.

	Contacts	Net Ea.*	Amph. No.	Contacts	Net Ea.*
	4	29c	49-RSS7L	7 Large	35c
	5	31c	49-RSS7S	7 Small	36c
	6	32c	49-RSS8	8 Octal	31c

MIP MOLDED-IN-PLATE SOCKETS



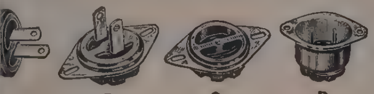
High dielectric black bakelite, steel mounting plate molded into solid body. Cannot come loose. Mount in 1⁵⁄₃₂" hole. Two ⁵⁄₃₂" holes on 1½" mounting centers, except 77-MIP7L and 77-MIP20 which mount in 1⁹⁄₃₂" hole and Compact MIP's which mount in 1⅛" holes on 1⁵⁄₁₆" centers.

Black Phenolic		Mica-Filled Phenolic	
Amphenol No.	Net Each*	Amphenol No.	Net Each*
77-MIP-4	9c	77-MIP-4T	11c
77-MIP-5	10c	77-MIP-5T	12c
77-MIP-6	12c	77-MIP-6T	13c
77-MIP-7L	13c	77-MIP-7LT	19c
77-MIP-7S	13c	77-MIP-7ST	14c
77-MIP-8	10c	77-MIP-8T	12c
77-MIP-9	12c	77-MIP-9T	13c
77-MIP-11	13c	77-MIP-11T	16c
77-MIP-12	15c	77-MIP-12T	17c
77-MIP-20	34c	....	....

COMPACT MIP SOCKETS

88-8	11c	88-8T	12c
88-8X	14c	88-8XT	15c

RECEPTACLES, CONNECTORS, 110-250V



Cable Connectors—Fig. A—End Cable Outlet for to ½" dia. Fully shielded cable terminals with black onnector units encased in a tight cap that fits securely lly removed. Available with cable clamp that relieves onnections of strain.

No. 61-F11—2 Pole Universal Receptacle. Net* 32c

No. 61-M11—2 Pole Standard Plug. Net*......34c

lugs and Receptacles—Fig. B—Compact in design, om high dielectric black bakelite. Rated at 15 amp., 10 amp., 250 V. Requires 1⁹⁄₃₂" D. chassis hole; has ew holes on 1½" to 1⅞" centers.

No. 61-F1—2 Pole Universal Receptacle. Net*. 23c

No. 61-M1—2 Pole Standard Plug. Net Each*. .23c

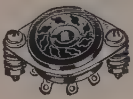
n-Plate Receptacle—Fig. C.—Same as 61-F1 Recepstandard steel mounting plate molded into the Bakelite unts in 1³⁄₁₆" hole: two ⁵⁄₃₂" screw holes on 1½" centers.

ol No. 61-MIP-61F—2 Pole Univ. Receptacle. 19c

otor Plug—Fig. D—Neat, compact plug or receptacle 61-61 steel shell for below surface mounting. Room for of Amphenol End Cable Outlet Plugs.

ol No. 61-M10—2 Pole Standard Plug. Net Each* 30c

FLOATING OCTAL SOCKET



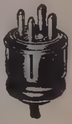
Live rubber grommets fit into mounting holes to cushion this socket for vibration free operation. Black bakelite dielectric. Mounts in 1³⁄₁₆" hole above or below chassis, ¼" holes on 1½" centers.

Amphenol No. 77-MIP-8FK—Complete with 4 rubber grommets, 2 mounting screws. Net Each*... 22c

Amphenol No. 77-MIP-8F—Net*..11c

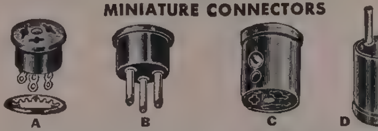
SHIELDED CABLE CONNECTORS

Multi-wire cable connectors consist of "S" type sockets and "CP" type plugs in metal cap shields.



Contacts	Male Amph. No. 86-	Net Each in Lots of		Female Amph. No. 78-	Net Each in Lots of	
		1-99	100-249		1-99	100-249
4	PM4	$0.21	$0.175	PF4	$0.174	$0.145
5	PM5	.21	.175	PF5	.183	.152
6	PM6	.222	.185	PF6	.192	.16
7 small	PM7S	.228	.190	PF7S	.198	.165
8 octal	PM8	.216	.180	PF8	.192	.16
9 keyed	PM9	.222	.185	PF9	.207	.172
11 keyed	PM11	.234	.195	PF11	.222	.185

MINIATURE CONNECTORS

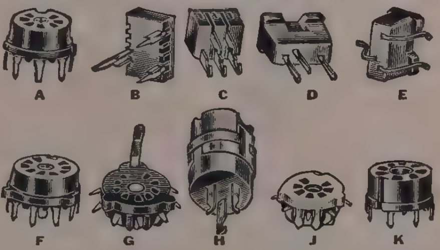


For cables up to 6 conductors. Polarized contacts make incorrect insertions impossible. Shell length on shielded connectors ¹³⁄₁₆". Chassis mounting receptacles mount in ⅝" hole, with ring.

Amphenol No.	Style	Contacts	Net Each*
78-S3S	A	3	8c
78-S4S	A	4	8c
71-3S	B	3	7c
71-4S	B	4	8c
78-S6S	A	6	11c
71-6S	B	6	10c
91-MPM3S	D	3	23c
91-MPF3S	C	3	28c
91-MPM4S	D	4	23c
91-MPF4S	C	4	28c

***Net Each prices in 1-99 quantities; write for other quantity discounts.**

CINCH-JONES TRANSISTOR SOCKETS



Subminiature and miniature sockets for use with transistors, printed circuits and subminiature tubes. **Features:** Insure positive electrical contact; hold transistors and tubes securely in place; permit easy maintenance and replacement; provide maximum insulation resistance and minimum high frequency loss. Automatically assembled to assure the uniformity and quality control needed for automation processes.

Variations of these models listed as well as other designs can be made to your special order.

Cinch-Jones No.	Fig.	Description	Body Size, In.			Contacts		Net Each
			Long	Wide	Deep	No.	Long	
44P-22661	A	Standoff	²⁷⁄₃₂*	1§	¹³⁄₃₂#	9	⁵⁄₃₂‡	$0.12
46A-22452	B	Submin. Tube	.350	.237	.140	3	.284	.24
54A-14148	C	Submin. Tube	.260	¼	.175	5	¹³⁄₆₄	.40
46A-20928	D	Submin.	.350	.281	.218	3	¹¹⁄₆₄	.20
46P-22485	E	Trans-Pr.C.	.350	⁹⁄₃₂	⁷⁄₃₂	3	.178	.49
53P-22698	F	Standoff	¾*	.875§	¹³⁄₃₂#	7	⁵⁄₃₂‡	.09
44P-20684	G	Print. Cir.	²⁷⁄₃₂*	1¹⁄₃₂§	²⁵⁄₆₄	9†	²¹⁄₆₄	.15
54A-17431	H	Transistor	.400	......	²⁵⁄₆₄	3	¼	1.32
53P-20683	J	Min. Socket	¾*	⅞§	²⁵⁄₆₄	7	²¹⁄₆₄	.12
51P-22743	K	Print. Cir.	1¹⁄₁₆*	......	½	8	¼	.10

*Diameter. §Diameter to outside of mounting lugs. #Including ¹⁄₁₆" standoffs. †From ¹⁄₁₆" standoffs. ‡Plus ⁵⁄₁₆" long grounding lug extending vertically above socket.

Sockets, Plugs and Terminals

WAFER TYPE SOCKETS

TYPE A MINIATURE

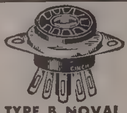
TYPE B NOVAL

TYPE C OCTAL

Cinch Jones No.	Type No.	Description	Mtg. Centers	Net Each
7W2A	A	7-pin min. Chocolate XP bake-	⅞"	$0.09
7WL2	A	lite laminations. Solder-coated	1"	.11
7WL4	A	brass contacts and center shield.	1$\frac{5}{16}$"	.11
9W1	B	9-pin min. Solder-coated brass	1⅛"	.13
9W2	B	contacts ahd center shield.	1$\frac{5}{16}$"	.13
8W1	C	Wafer octal. Fits all standard 8-	1$\frac{5}{16}$	.10
8W2	C	prong tubes. .136 dia. mtg. hole.	1½"	.10

SADDLE TYPE SOCKETS

TYPE A MINIATURE

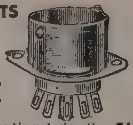

TYPE B NOVAL

TYPE C OCTAL

Cinch Jones No.	Type No.	Description	Mtg. Centers	Mounting	Net Each
7EB	A	Black	⅞"	Bottom	$0.09
7EM	A	Mica	⅞"	Bottom	.11
7AB1	A	Black	⅞"	Top	.09
7AM1	A	Mica	⅞"	Top	.11
9EB	B	Black	1⅛"	Bottom	.12
9EM	B	Mica	1⅛"	Bottom	.14
9AB	B	Black	1⅛"	Top	.12
9AM	B	Mica	1⅛"	Top	.14
8AB	C	Black	1$\frac{5}{16}$"	Top	.08
8AM	C	Mica	1$\frac{5}{16}$"	Bottom	.12
8EB	C	Black	1½"	Bottom	.09
8EM	C	Mica	1½"	Top	.13
8EC	C	Ceramic	1½"	Top	.35

SHIELD BASE TYPE SOCKETS

TYPE A MINIATURE


TYPE B NOVAL

7X Series: ⅞" mounting centers, .125" mounting hole dia. **7J Series:** JAN version of 7X Series. **9X Series:** 1⅛" mounting centers, .098" mounting hole dia. **9J Series:** JAN version of 9X.

C-J No.	Type	Description	Net Each	C-J No.	Type	Description	Net Each
7XB1	A	Black	$0.17	9XB	B	Black	$0.24
7XM1	A	Mica	.20	9XM	B	Mica	.27
7XC	A	Ceramic	.32	9XC	B	Ceramic	.45
7JC	A	Ceramic	.33	9JM	B	Mica	.27
7JM	A	Mica	.24	9JC	B	Ceramic	.36

SUB-MINIATURE HEARING AID SOCKETS

Molded from mica filled low-loss bakelite with silver plated beryllium copper contacts. For Raytheon Type CK series subminiature tubes.

		Net Each
2H5	5-prong	$0.28
2H6	6-prong	.29
2H7	7-prong	.31

BATTERY PLUGS

5A1

5A4

5B1A

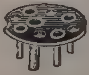
5M

5F

5AB1

5AB2

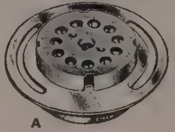
5AB5


5AB6

Cinch Jones No.	Prongs	For	Net Each
5A1	2	1½ A	$0.04
5A2	2	3 A	.05
5A3	2	4½ A	.04
5A4	2	6 A	.04
5A5	3	7½ A	.06
5B1A	3	45 B Small	.05
5B2	3	45 B Large	.05
5D	...	45 "B"	.36
5M	...	67½ B	.03
5F	...	67½ B	.04
5MFA	...	67½ B	.21
5C1	3	4½ C	.07

Cinch Jones No.	Prongs	For	Net Each
5C2	4	22½ C	$0.08
5AB1	4	1½ A, 90 B	.07
6K4	4	9 A, 90 B	.06
5AB2	4	1½ A, 63, 90 B	.05
5AB3	4	6 A, 90 B	.06
5AB4	5	6 A, 90 B	.09
5AB5	4	6 A, 90 B	.07
5AB6	5	7½ A, 90 B	.08
5AB7	5	9 A, 90 B	.09
5AB8	5	9 A, 90 B	.08

MAGNAL AND DIHEPTAL SOCKETS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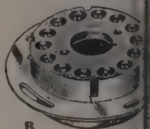

B

11-PRONG MAGNAL (Fig. A) Mica-filled low loss bakelite. 1$\frac{23}{32}$" wide x 1$\frac{9}{64}$" high. Full floating silver plated beryllium copper contacts. For use with 5BP1 and 2AP1. **Cinch No. 3M11**—Net. **$4.56**

No. 3R11—Steel mounting ring. Net Each..................**32c**

14-PRONG DIHEPTAL (Fig. B) Same features as Magnal. **No. 3B14**—Black. Net. **$1.52**

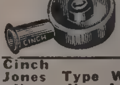
No. 3M14—Mica. Net. .**$1.90**

No. 3R14—Mtg. Ring. Net.**32c**

110-250 VOLT SOCKET

Rated at 15 amp., 110 V or 10 amp., 250 V. Accepts any standard 2-prong electric plug. Mounts in $\frac{45}{64}$" x $\frac{35}{64}$" hole. Ideal for radio and TV chassis. **2R2**—Net..**15c**

SECOND ANODE CONNECTORS


TYPE A

TYP

Cinch Jones No.	Type No.	Wire Lead
3A1	A	....
3A2	B	12"
3A3	B	15"
3A4	B	18"

SHIEL AND SH BASE

TYPE A

TYPE B

TYPE C

TYPE

J in number indicates JAN Type.

C-J No.	Type	Lgth. In.	Shld.-Base	Net Each	C-J No.	Type	Lgth. In.	Shld.-Base
7S2	A	1⅜	Shld.	$0.13	9S1	A	1½	Shld.
7S3	A	1¾	Shld.	.13	9S2	A	1$\frac{15}{16}$	Shld.
7S4	A	2¼	Shld.	.19	9S3	A	2⅜	Shld.
7SJ2	A	1⅜	Shld.	.14	9SJ1	A	1½	Shld.
7SJ3	A	1¾	Shld.	.15	9SJ2	A	1$\frac{15}{16}$	Shld.
7SJ4	A	2¼	Shld.	.17	9SJ3	A	2⅜	Shld
7S1	C	1$\frac{53}{64}$	Shld.	.08	9SB1	B	*	Base
7SB1‡	.....	⅝†	Base	.13	7SB3	D	$\frac{11}{32}$#	Base
7SB2§	.....	⅜†	Base	.26	.....	.....	.....	.....

*1⅛" mntg. centers; ⅛" dia. mntg. holes. †⅞" mntg. cntrs. dia. mntg. hole. #⅞" mntg. cntrs.; .098" dia. mntg. hole. §Brass.

TERMINAL STRIPS

SCREW TYPE

A

LUG TYPE B

CONTACT

SCREW TYPE

Cinch No.	Contacts	Mtg. Ctrs.	Net Each
17-1	1	⅞"	$0.04
17-2	2	1$\frac{5}{16}$"	.06
17-3	3	1¾"	.09
17-4	4	2$\frac{3}{16}$"	.12
17-5	5	2⅝"	.14
17-6	6	3$\frac{1}{16}$"	.17
17-7	7	3½"	.21
17-8	8	3$\frac{15}{16}$"	.23
17-9	9	4⅜"	.27
17-10	10	4$\frac{13}{16}$"	.29

CONTACT TYPE

Cinch Jones No.	Contacts	Mtg. Ctrs.
49-1	1	¾"
49-2	2	1⅛"
49-3	3	1½"
49-4	4	1⅞"
49-5	5	2¼"
49-6	6	2⅝"

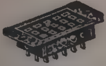
LUG TYPE

C-J No.	Lugs	M*	Net Ea.	C-J No.	Lugs	M*	Net Ea.	C-J No.	Lugs
51†	1	...	2c	53E	3	...	4c	54A	6
51A#	2	...	2c	53F	4	...	4c	54B	4
51B‡‡	1	...	2c	53B	3	A	4c	54C	5
51C‡	2	...	2c	53C	5	A	4c	55	5
51F§	1	...	2c	51R**	1	...	2c	55A	7
52	2	...	2c	51L††	1	...	2c	55B	5
52A	3	...	2c	52R**	2	...	3c	55C	7
52B	2	...	2c	51T§	2	...	2c	56	6
52C	3	...	2c	52T§	4	...	3c	56A	8
53	3	B	5c	53T§	6	...	4c	56B	6
53A	5	B	5c	54	4	C	5c	56C	8

†Type A (lug at left). #Type B (lug at left). ‡‡Type A right). ‡Type B (lug at right). §Vertical. **Side mtg., lu ††Side mtg., lug at right. *Mounting Centers: A) ¾"; C) 1⅞"; D) 2¼"; E) 2⅝".

ward B. Jones Connectors

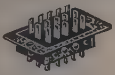
ETS
[illegible]
OW
ETS



S315 SB

.	Con-tacts	Net Each
	15	$1.07
	18	1.27
	21	1.49
	24	1.75
	27	1.96
	30	2.23
	33	2.44

B
W
TS



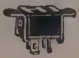
P315 SB

.	Con-tacts	Net Each
	15	$0.95
	18	1.17
	21	1.38
	24	1.64
	27	1.84
	30	2.11
	33	2.32

"300" SERIES CONNECTORS

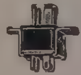
Compact, Polarized Connectors. Black crystal finished metal caps encase metal body. Phosphor bronze "knifeswitch" type socket contacts engage both sides of flat plug contacts. Rated at 730 rms volts at 10 amps.

SOCKETS TYPE AB WITH ANGLE BRACKETS



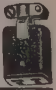
Cinch Jones No.	Con-tacts	Net Each
S302AB	2	$0.21
S303AB	3	.25
S304AB	4	.28
S306AB	6	.35
S308AB	8	.44
S310AB	10	.52
S312AB	12	.60

PLUGS TYPE AB WITH ANGLE BRACKETS



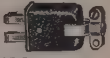
Cinch Jones No.	Con-tacts	Net Each
P302AB	2	$0.19
P303AB	3	.24
P304AB	4	.26
P306AB	6	.32
P308AB	8	.38
P310AB	10	.44
P312AB	12	.49

SOCKETS TYPE CCT WITH CABLE CLAMPS



Cinch Jones No.	Con-tacts	Net Each
S302CCT	2	$0.45
S303CCT	3	.49
S304CCT	4	.52
S306CCT	6	.60
S308CCT	8	.70
S310CCT	10	.78
S312CCT	12	.88

PLUGS TYPE CCT WITH CABLE CLAMPS



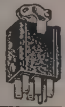
Cinch Jones No.	Con-tacts	Net Each
P302CCT	2	$0.44
P303CCT	3	.47
P304CCT	4	.52
P306CCT	6	.57
P308CCT	8	.63
P310CCT	10	.70
P312CCT	12	.77

400 SERIES AND 2400 SERIES

400 Series are rated at 11,000 rms volts at 15 amps. Polarized Phosphor bronze "knifeswitch" socket contacts engage both sides of flat plug contacts.

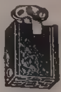
2400 Series are an improved design similar to the 400 series. Barriers around the terminals increase the creepage distance of contact to contact and contact to ground, resulting in higher current rating. Interchangeable with the 400 series.

ERIES GS CCT TH LAMPS



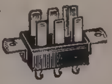
.	Con-tacts	Net Each
	2	$0.74
	4	.91
	6	1.06
	8	1.21
	10	1.37
	12	1.52
400 SERIES		
T	2	0.92
T	4	1.03
T	6	1.16
T	8	1.28
T	10	1.41
T	12	1.55

400 SERIES SOCKETS TYPE CCT WITH CABLE CLAMPS



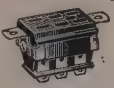
Cinch Jones No.	Con-tacts	Net Each
S402CCT	2	$0.80
S404CCT	4	1.01
S406CCT	6	1.22
S408CCT	8	1.43
S410CCT	10	1.65
S412CCT	12	1.85
2400 SERIES		
S2402CCT	2	0.99
S2404CCT	4	1.10
S2406CCT	6	1.23
S2408CCT	8	1.37
S2410CCT	10	1.51
S2412CCT	12	1.65

400 SERIES PLUGS TYPE AB ANGLE BRACKETS



Cinch Jones No.	Con-tacts	Net Each
P402AB	2	$0.47
P404AB	4	.58
P406AB	6	.70
P408AB	8	.80
P410AB	10	.91
P412AB	12	1.00
2400 SERIES		
P2402SB	2	0.65
P2404SB	4	.77
P2406SB	6	.89
P2408SB	8	1.01
P2410SB	10	1.16
P2412SB	12	1.27

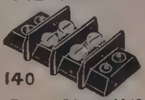
400 SERIES SOCKETS TYPE AB ANGLE BRACKETS



Cinch Jones No.	Con-tacts	Net Each
S402AB	2	$0.53
S404AB	4	.70
S406AB	6	.85
S408AB	8	1.00
S410AB	10	1.17
S412AB	12	1.32
2400 SERIES		
S2402SB	2	0.71
S2404SB	4	.84
S2406SB	6	.97
S2408SB	8	1.10
S2410SB	10	1.25
S2412SB	12	1.38

ES BARRIERS No. 140-141-142 SERIES

insulation is provided by hav-
ers placed between each ter-
ese barriers follow around the
e strips and terminate at the
y not only make a long leakage
prevent direct shorts from
res at terminals.



140

. 7/8" wide High. 3/8" nters.

n.	Net Each
	$0.14
	.20
	.25
	.31
	.35
	.46
	.57
	.67

contacts.

Base Dim. 1 1/8" Wide x 1/2" High. 7/16" Term. Centers.

Cinch Jones No.	Term.	Net Each
2-141	2	$0.19
3-141	3	.25
4-141	4	.32
5-141	5	.39
6-141	6	.45
8-141	8	.59
10-141	10	.73
12-141	12	.86

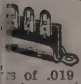
Up to 20 contacts.

Base Dim. 1 5/16" Wide x 5/8" High. 9/16" Term. Centers.

Cinch Jones No.	Term.	Net Each
2-142	2	$0.22
3-142	3	.31
4-142	4	.39
5-142	5	.47
6-142	6	.55
8-142	8	.72
10-142	10	.89
12-142	12	1.06

Up to 17 contacts.

JONES 2000 SERIES



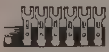
Compact and sturdy junction terminal strip. Useful in assembling radio chassis, wiring, etc. Available in sizes from two terminals to thirteen terminals. Sturdy bakelite insulation.

s of .019 brass, tin plated on 5/16" centers. Cadmium
el mounting brackets.

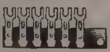
m.	Mtg. Ctrs.	Net Each
2	1"	$0.06
3	1 5/16"	.07
4	1 5/8"	.08
5	1 15/16"	.09
6	2 1/4"	.10
7	2 9/16"	.11

Cinch Jones No.	Term.	Mtg. Ctrs.	Net Each
2008	8	2 7/8"	$0.11
2009	9	3 3/16"	.12
2010	10	3 1/2"	.13
2011	11	3 13/16"	.14
2012	12	4 1/8"	.15
2013	13	4 7/16"	.16

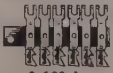
JONES FANNING STRIPS



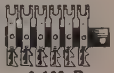
6-161-L



6-161-R



6-160-L



6-160-R

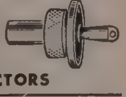
160 Series fit the 140 series barriers. Terminals are mounted on 3/32" Bakelite, 1/2" wide and on 3/8" centers.
161 Series fit the 141 series barriers. Terminals are mounted on 3/32" Bakelite, 5/8" wide and on 7/16" centers.
162 Series (not illustrated) are the same design as the 161 series, but fit the 142 series barriers. Terminals are mounted on 3/16" Bakelite, 5/8" wide and on 9/16" centers.

No. Term.	160 Series*	Net Each	161 Series†	Net Each	162 Series•	Net Each
2	160L—160R	8c	161L—161R	8c	162L—162R	10c
3	160L—160R	12c	161L—161R	13c	162L—162R	14c
4	160L—160R	15c	161L—161R	16c	162L—162R	17c
5	160L—160R	19c	161L—161R	20c	162L—162R	21c
6	160L—160R	23c	161L—161R	24c	162L—162R	26c
8	160L—160R	31c	161L—161R	31c	162L—162R	33c
10	160L—160R	38c	161L—161R	39c	162L—162R	41c
12	160L—160R	46c	161L—161R	46c	162L—162R	48c

*Up to 21 contacts. †Up to 20 contacts. •Up to 17 contacts.

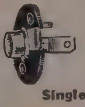
JONES 101 SERIES

Low loss type for high frequency. Uses prongs 1/8" diameter. Nickel plated brass. For co-axial or shielded single wire conductor.

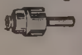


P101 1/4" Male **$0.47** | **S101** Female **$0.42**

RCA TYPE PHONO CONNECTORS



Phono Plugs

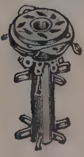


Cinch No.	Dimensions	Net Each
13A Plug	9/16" pin	$0.06
13E plug	11/16" pin	.06

Jack, 11/16" mounting centers for use with "A".

Single Phono Jack Cinch No. 81A—Net Each.....**$0.08**

Vector Socket Turrets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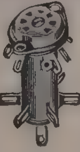
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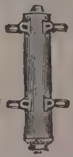
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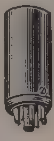
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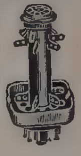
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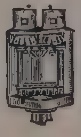
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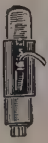
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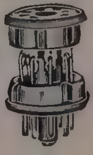
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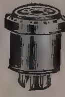
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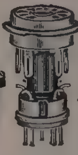
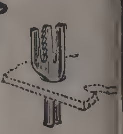

J


K

SOCKET TURRETS (FIGS. A, B, C)

Compact, efficient mount for circuit components. Grade XXXP phenolic posts ½″ O.D., 1/16″ wall; mica filled sockets; fused tin-brass terminals; cadmium plated steel saddles. For premium quality sockets (hot-tinned brass or steel saddles, silver-plated beryllium copper terminals), add suffix "J" to stock number; price is slightly higher. Turret has six terminals at far end; three, six or nine near socket. Terminal turrets without sockets are useful for many mountings; transistor types fit three in line or three on 0.2″ dia. circle type bases. Transistor wafer types have punched wafer for direct, socket, or mounting clip transistor mounting.

Vector No.	Socket Type and Assembly	Hgt., In.	No. Term.	Net Each
10-O-12T	Octal socket, bonded assembly	2½	12	$0.66
8-O-9T	Octal socket, bonded assembly	2	9	.60
6-O-6T	Octal socket, bonded assembly	1½	6	.54
10-MB-12T	Min. 7-pin; bolted assembly	2½	12	.81
8-M-9T	Min. 7-pin; riveted assembly	2	9	.69
6-M-6T	Min. 7-pin; riveted assembly	1½	6	.60
10-NB-12T	9-pin; bolted assembly	2½	12	.81
8-N-9T	9-pin; riveted assembly	2	9	.69
6-N-6T	9-pin; riveted assembly	1½	6	.63
10-12	Terminal turret (no socket)	2½	12	.51
8-12	Terminal turret (no socket)	2	12	.48
6-A-12T	Transistor socket with saddle	1½	12	1.06
8-A-12T	Transistor socket with saddle	2	12	1.08
7-A-12T-440	Transistor; end nut (no saddle)	1¾	12	1.04
652	2 wafers (no socket)	2	12	.81
654	2 wafers (no socket)	2½	12	.87

PLUG-IN UNITS (FIGS. D, E, F)

Detachable aluminum covers for easy accessibility. Tube base type 8-prong plugs; add suffix "K1.1" for 9-prong octal type plug, "K" for 11-prong octal plug. For silver-plated, tin-dipped beryllium contacts add suffix "J". For moisture and fungus impregnated turret, add suffix "C". For rectangular perforated cover, add suffix "P".

Vector No.	Plug Type	Socket Type	Turret Type	Hgt., In.	Size, In.	Net Each
B10M	Octal	Min. 7-pin	Post	2½	1 7/16 sq.	$1.91
B10N	Octal	9-pin	Post	2½	1 7/16 sq.	1.95
B10T	Octal	None	Post	2½	1 7/16 sq.	1.65
C12M	Octal	Min. 7-pin	Post	3	2 sq.	2.24
C12N	Octal	9-pin	Post	3	2 sq.	2.27
C12T	Octal	None	Post	3	2 sq.	1.79
C12NN-2	Octal	Two 9-pin	Deck	3	2 sq.	3.38
C12MM-2	Octal	Two min. 7-pin	Deck	3	2 sq.	3.38
G2-10-M	Octal	Min. 7-pin	None	2½	1¼ dia.	1.66
G2-10-N	Octal	9-pin	None	2½	1¼ dia.	1.69
G2.1-8-N	Noval	9-pin	None	2	¾ dia.	2.04
G2.2-8-M	Min. 7-pin	Min. 7-pin	None	2	⅝ dia.	1.93
G2-10	Octal	None	None	2½	1¼ dia.	.97
G2.1-8	Noval	None	None	2	¾ dia.	1.35
G2.2-8	Min. 7-pin	None	None	2	⅝ dia.	1.21
G2-10-4	Octal*	None	Wall	2½	1¼ dia.	1.68
G2.1-8-4	Noval*	None	Wall	2	¾	1.73
G2.1-8-4	Min. 7-pin*	None	Wall	2	⅝	1.71

*Wall has grid matching JETEC transistor leads.

"ROTOPROBE" TEST ADAPTERS (FIG. G)

Switching-type adapters, with permanently attached test lead. Leads may be switched to any tube pin by rotating shell; indicator shows pin connected.

Vector No.	Tube Type	Body Dia.	Socket Ht.	Net Ea.
T-7B	7-Pin Min.	0.75″	1.87″	$ 3.30
T-8B	8-Pin Octal	1.37″	1.62″	3.45
T-9B	9-Pin Noval	0.87″	1.87″	3.60
T-789B	Set of above three types in plastic case			11.18

EXPERIMENTERS' TEST ADAPTERS (FIG. H)

Less shields and tabs; connections can be cross-connected by user. Add "S" to stock number for outer shell.

Vector No.	Socket Type	Lgth., less prongs	Net Each
TX-8-O	Octal	1.50″	$1.30
TX-7-M	Miniature	1.47″	.80
TX-9-N	Noval	1.47″	.85
TX-789	Set of above three types in kit		3.25

TUBE SOCKET TEST ADAPTERS (FIG. I)

Each adapter has straight through plug to socket connections extended to radial test tabs on adapter skirt surrounding the socket. Tabs are recessed into skirt. Contacts of highest quality silver plated beryllium copper. Molded bakelite bodies.

Vector No.	Tube Type	Body Dia.	Skirt Dia.	Length*	Net Ea.
T-7-M	7-Pin Min.	0.74″	1.03″	1.47″	$1.65
T-8-O	8-Pin Octal	1.26″	1.56″	1.50″	1.85
T-9-N	9-Pin Noval	0.87″	1.16″	1.47″	1.85
T-789	Set of above 3 types in plastic case				6.20

*Less prongs.

SOCKET CHANGE ADAPTERS (FIG. J)

Permit use of unlike tube bases in existing sockets when of tube type is required; wired by user. For outer shell, ad "S" to stock number.

Vector No.	Socket Type	Plug Type	Net E
T-780	Min. 7-pin	Octal	$1.0
T-79	Min. 7-pin	Noval 9-pin	1.0
T-807	Octal	Min. 7-pin	1.2
T-809	Octal	Min. 9-pin	1.2
T-97	9-pin	Min. 7-pin	1.
T-980	9-pin	Octal	1.0

TUBE TESTER SOCKET EXTENDERS (NOT ILLUS.)

Similar to Fig. I, except do not have test points. Also ha screw through center to secure to original socket. Saves w tester sockets; easily replaced when worn.

Vector No.	Tube Type	Body Dia.	Skirt Dia.	Length*	N
1262	8-Pin Octal	1⅛″	....	⅞″	$
1263	9-Pin Noval	¾″	....	13/16″	
1264	7-Pin Min.	⅝″	....	13/16″	

*Less prongs.

EXPERIMENTERS' CHASSIS KITS (NOT ILLUS.)

Rapid circuit set-up provided by punched board, push- minals, aluminum channel supports and assorted sock mounting hardware.

Vector No.	Description	N
Kit 20X	Sampler with 4¾″ x 8½″ deck, accessories	$
Kit 21X	Terminals, sockets, 4¾″ x 17″ deck, access.	
Kit 22X	Transistor circuitry, 4¾″ x 8½″ deck	

PUSH-IN TERMINALS (FIG. K)

Self-holding without staking in 0.093″ hole. Wires insert rated slots without soldering in test setups. Tandems of t three terminals also available. Available in 1,000 or larg quantities. No. T9.6 has notch for clipping large diode lea

Vector No.	Mtg. Hole	Construction
T9.4	0.093″	Fused tin-plated half-hard brass
T9.6	0.093″	Fused tin-plated beryllium copper

VECTORBOARD–PRE-PUNCHED TERMINAL BOAR (NOT ILLUS.)

Phenolic (standard) and epoxy paper (EP) with pre-punch for quick mounting of circuits. Also available in glass ep glass silicone. **"A" Pattern:** 0.093″ holes on 0.265″ centers **Pattern:** Is the same as A, except board thickness is 3/32″. " **tern:** 0.062″ holes on 0.20″ centers. **"G" Pattern:** Two 0.20″ grids staggered to give JETEC grid.

Vector No.	Pattern	Size, W. x L. x Thk.	Pitch Dis.
64A18	A	4⅞″ x 17.1″ x 1/16″	64 x 18
64AA18	AA	4⅞″ x 17.1″ x 3/32″	64 x 18
85F24EP	F	4⅞″ x 17.1″ x 1/16″	85 x 23
85G24EP	G	4⅞″ x 17.1″ x 1/16″	85 x 23

TERMINAL STRIPS (NOT ILLUS.)

Terminal strips use "A" pattern punched board and zip o terminals for speed, economy and efficiency. XXXP ph standard; glass silicone, glass epoxy and epoxy paper also a

Vector No.	Type Term.	No. Term.	Size, W. x L.
408	Zip T9.0	8	9/16″ x 2⅛″
416	Zip T9.0	16	9/16″ x 4¼″
32AA5T9.1	Zip T9.1	64	1⅜″ x 8½″
32AA7T6.0	Forklet T6.1	64	1 29/32″ x 8½″

CABLE CONNECTOR PLUGS (FIG. L)

Supply a need for connecting cables to miniature tube Consist of addition of cylindrical metal shells to tube b and rubber grommets in the sidewalls of the shells to cable. Aluminum shells will pass into standard tube shie

Vector Model P7C—7-pin, ⅝″ O.D., 2 5/16″ long. Net Each..........

Vector Model P9C—9-pin, ¾″ O.D., 2 5/16″ long. Net Ea..

HEATER RECTIFIER (NOT ILLUS.)

Extra small rectifier-filter circuit reduces hum; supplies D current to first stage of low-level amplifiers. Easy mount plug 1⅜″ sq. x 4″ mounting space above chassis. Selen wave rectifier; low capacity electrolytic filter. **Input:** 6.3- 60 cps. **Output:** 85% of input volts at 0.3 amp DC (ma of AC input at 0.15 amp load. **Ripple:** Less than 7% 0.3 amp.

Vector No. B-3001 Heater Rectifier—Net Each........

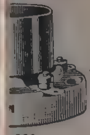
SOCKET SADDLE NUTS (NOT ILLUS.)

"U" nuts slip over and clamp on socket saddles for eas attachment to chassis.

Vector No. 4/40-U Saddle Nut—Fits 4-40 screws. Net for 50..........

Vector No. 4ZU—Stronger unit fits #4 sheet metal screw. Net for 50..........

F. Johnson Special Tube Sockets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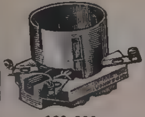
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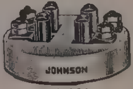
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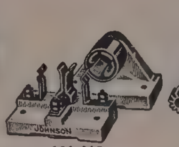
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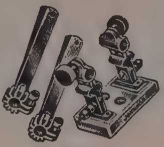
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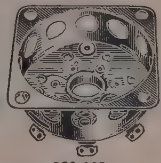
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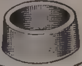
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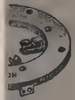
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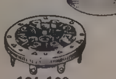
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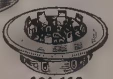
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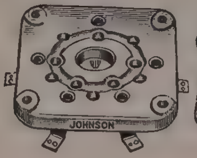
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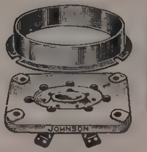
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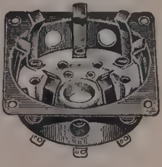
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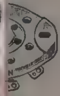
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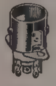
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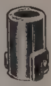
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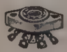

120-267

STANDARDIZATION OF SOCKETS

ing the number of variations of special socket types,
cking and delivery is possible. The three grades are:
(designated **-1**), a commercial grade socket for
equirements; porcelain bases, glazed top and sides;
bronze contacts, cadmium plated .0002. Nickel
rdware. Etched aluminum bayonet shells. **Industrial**
ed **-100**), superior in quality to Standard; glazed
ases, DC200 treated; phosphor bronze or beryllium
ntacts, .0005 silver plated; aluminum bayonet shells,
. 14 treated; fungus-resistant cushion washers under
Military (designated **-200**), top quality to meet
requirements; glazed L4 steatite bases, DC200
eryllium copper contacts, .0005 silver plated; hot tin
rminals, brass bayonet shells, .0003 nickel plated;
nickel plated .0002 for threaded, .0003 unthreaded;
sistant cushion washers under contacts.

BAYONET SOCKETS

UTY MEDIUM 4-PIN TYPE 123-209. For medium
s, such as the 866A or 811A with RETMA Base No.
ra heavy side wiping contacts and extended creepage
high voltage breakdown. Four mounting holes.
4-PIN TYPE 123-210. Economical socket for bayonet
MA Base No. A-410). Two mounting holes.
PIN TYPE 123-211. A popular "50-watt" socket for
as 872A, 211 and others with RETMA Base No.
ble wiping filament contacts for extra heavy current;
or screw or solder connections; two mounting holes.
MBO 4-PIN TYPE 123-206. A heavy duty industrial
gh voltage or heavy current; for tubes such as 8008,
104, GL146, etc., with RETMA Base No. A4-18;
n current, insertion type spring contacts; two recessed
noles; three heavy retaining springs grip tube; screw

	Diam. In.	Ht. In.	Mtg. Ctr. In.	Net Each		
				Standard -1	Industrial -100	Military -200
	2 13/16	1 7/8	2 5/16	$1.50	$3.30	$3.95
	2 1/2	1 7/8	2 1/16	1.45	3.25	3.90
	3 3/8	2 9/16	2 13/16	1.95	3.90	4.80
	*	2 1/2	2 3/4	4.30	#	4.85

x 3½". #Use No. 123-206-1.

SPECIAL SOCKETS

nd 833A. Steatite base and pair of 119-843 tube cap
. Knurled thumb nuts for easy tube installation. Base
strain on tube envelope, prevents breakage. 4⅜" flexible
at radiating aluminum plate terminals. $8.10
o. 124-212—Net Each........................
o. 119-843—Tube Cap. Connector only. Net..**$1.35**
152TL and 304TL. Glazed porcelain base, nickel
tacts. Std. has .0001, Mil. .0005 silver plating. $1.85
o. 124-213-1—Std. or Indust. grade. Net Each.
o. 124-213-200—Military grade. Net Each....**$2.30**
705A, 715A, and 715B Western Electric. Glazed grade
e base, special locking device. Contacts .0003 silver
standard, .001 on military. Long post single lock .0003
ed on both types. $2.20
o. 122-234-1—Std. or Indust. grade. Net Each.
o. 122-234-200—Military grade. Net Each....**$2.75**
No. 124-214-1 and -200—For 750TL, 1500T, 2000T,
d Eimac 2-450A. **Write for further information.**

MINIATURE TUBE SHIELDS

el plated to meet MIL specifications. Twist-to-lock.
ube retaining spring. Non-ferrous, non-magnetic.

o.	Military Designation	Fits Socket	Length	Net
	TS102U01	177, 277	1 3/8"	15c
	TS102U02	177, 277	1 3/4"	16c
	TS102U03	177, 277	2 1/4"	18c
	TS103U01	199	1 1/2"	16c
0	TS103U02	199	1 15/16"	18c
1	TS103U03	199	2 3/8"	20c

WAFER SOCKETS

SEPTAR SOCKETS. 7-pin wafer sockets for tubes with RETMA Base No. E7-2. **Type 122-101** have ventilated shield, 5 tube retainer springs; mica capacitors can be mounted directly to socket. For VHF use with tubes 826, 832, 4D32, 4D22, PL6549, PL6569, etc. Special terminals for direct mounting of grid coils. Two holes for mounting of bus bar neutralization leads. Standard model has phosphor bronze silver plated contacts for maximum VHF efficiency. **Types 122-247 and -248** furnished with separate aluminum shield ring.

SMALL VHF SEPTAR SOCKET TYPE 122-105

Permits compact design in mobile, aircraft, etc., equipment. Molded recesses in base for each contact; contact cushion washers of melamine; sockets molded with pin circle groove and recessed pin holes; aluminum shell submounts tube for optimum input and output shielding, ⅜" hole for adequate ventilation. Bases on all three types are grade L4 steatite, glazed top and sides.

SUPER JUMBO 4-PIN TYPE 122-244. A heavy duty steatite insulated 4-pin wafer for tubes such as 8008 and many rectifier and thyratron types with RETMA Base No. A4-15, 16 and 18.

GIANT 5-PIN AND 7-PIN SOCKETS. Type 122-237 is for Giant 7-pin base tubes with RETMA Base No. A7-17 such as 4E-27, HK257, and 813. Contacts have maximum surface area against prongs. ¾" ventilating hole in base for tube seal cooling. **Type 122-275** is for Giant 5-pin base tubes, RETMA Base No. A5-19, such as 4-125A, 4-250A and RK-48. Tube seal ventilated by one central and five between-contact holes.

STANDARD WAFER SOCKETS TYPE 122-224, -225, -226, -227, -228. Steatite sockets for receiving and low power transmitting tubes.

Johnson Type	Sq. or Diam. In.	Ht. In.	Mtg. Ctr. In.	Net Each		
				Standard -1	Industrial -100	Military -200
122-101-	2 3/4	1 9/16	2 5/16	$2.35	#	$2.65
122-105-	2 1/4	1 5/16	1 13/16	1.25	$1.45	1.70
122-247-	2 5/8	17/32	1 7/8	1.45	1.65	1.90
122-248-	2 3/8	17/32	1 7/8	1.30	1.50	1.75
122-244-	2 5/8	11/16	1 7/8	1.60	1.80	2.15
122-237-	2 5/8	9/16	1 7/8	1.20	1.40	1.60
122-275-	2 7/8	3/4	2 1/4	1.90	2.20	2.60
122-224-†	‡	1/4	1 49/64	.69	.79	.93
122-225-†	‡	1/4	1 49/64	.76	.89	1.05
122-226-†	‡	1/4	1 49/64	.94	1.10	1.30
122-227-†	‡	1/4	1 49/64	.90	1.10	1.35
122-228-†	‡	3/16	1 49/64	.97	1.20	1.45

†Last digit indicates number of pins; 122-224- has 4 pins.
‡1 11/16" x 2 5/16", except -227 are 1 13/16" x 2 5/16". #Use No. 122-101-1.

SPECIAL PURPOSE 250 WATT SOCKET

124-215—A two-unit socket for "250 watt" tubes such as the 204A and 849. Anode cap RETMA Nos. C1-8, C1-9 and cathode mounting RETMA Nos. A3-20, A3-21 and A3-23. Bases are glazed porcelain, contacts phosphor bronze, nickel plated. $5.95
Net Each..

MINIATURE SOCKETS

Sockets for tubes with miniature button 7-pin bases, RETMA No. E7-1. Bases are steatite, DC-200 impregnated. Silver plated phosphor bronze contacts. Contacts for -277 are hot tin dipped. -277 shield base is brass, nickel-plated. Mounting centers ⅞".

Johnson No. 120-267—Miniature socket, all steatite. 41c
Net Each..

Johnson No. 120-277—Miniature socket with shield base.
Net Each..**59c**

HIGH POWER TUBE SOCKETS

For UHF use with high power tubes 4X150A, 4X150D, 4X250B and 4X250F; available with or without screen by-pass capacitor. Two section base of Kel-F plastic: Bottom holds contacts, top insulates and protects. Contacts are heat treated, silver plated beryllium copper. Annealed solder tabs.

Johnson No. 124-109-1—Basic socket less mounting ring and by-pass capacitor. Eight .128" holes on 1⅞" circle. Mounts under chassis hole 1 21/32" diameter. Net Each..................**$5.00**

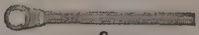
Johnson No. 124-110-1—With mount ring and 2700 μμfd by-pass capacitor. Mounts thru 2¼" hole with 3 clips for 6-32 screws. Cathode contacts not grounded. Net Each..........**$12.50**

Johnson No. 124-111-1—Heat resistant, steatite chimney for above sockets; tapered design. 2 9/32" dia. x 13/16" high outside dimensions. Net Each..............................**40c**

Thomas & Betts Hardware

A

B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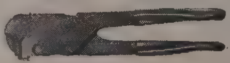
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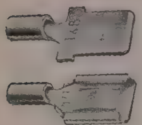
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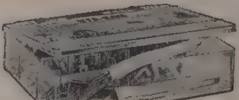
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STA-KON® TERMINALS

Popular terminals for general and special applications. Many sizes and styles; top performance at modest cost. U/L listed.

RING TONGUE TYPE (FIG. A)

T. & B. No.	Wire Range	Stud Size	Unit Qty.	Std. Pkge.	Net per 100, Lots of Below Unit Qty.	Unit Qty.	Std. Pkge.
A18-6	22-18	#6	100	1000	$ 4.80	$ 3.75	$ 3.00
A18-8	22-18	#8	100	500	4.80	3.75	3.00
A18-10	22-18	#10	100	1000	4.80	3.75	3.00
A18-14	22-18	¼	100	500	4.80	3.75	3.00
B14-6	20-14	#6	100	2000	4.80	3.75	3.00
B14-8	20-14	#8	100	2000	4.80	3.75	3.00
B14-10	20-14	#10	100	2000	4.80	3.75	3.00
B14-14	20-14	¼	100	2000	4.80	3.75	3.00
C10-6	16-10	#6	50	500	6.00	4.69	3.75
C10-8	16-10	#8	50	500	6.00	4.69	3.75
C10-10	16-10	#10	50	1000	6.00	4.69	3.75
C10-14	16-10	¼	50	1000	6.00	4.69	3.75
C10-516	16-10	5/16	50	1000	6.00	4.69	3.75
C10-38	16-10	⅜	50	500	6.00	4.69	3.75
D8-10	9, 8, 7	#10	25	500	12.40	9.69	7.75
D8-14	9, 8, 7	¼	25	500	12.40	9.69	7.75
D8-516	9, 8, 7	5/16	25	500	12.40	9.69	7.75
D8-38	9, 8, 7	⅜	25	500	12.40	9.69	7.75
E6-10	6, 5	#10	20	200	13.20	10.31	8.25
E6-14	6, 5	¼	20	200	13.20	10.31	8.25
E6-516	6, 5	5/16	20	200	13.20	10.31	8.25
E6-38	6, 5	⅜	20	200	13.20	10.31	8.25
F4-10	4, 3	#10	20	200	18.40	14.38	11.50
F4-14	4, 3	¼	20	200	18.40	14.38	11.50
F4-516	4, 3	5/16	20	200	18.40	14.38	11.50
F4-38	4, 3	⅜	20	200	18.40	14.38	11.50
G2-14	2	¼	10	100	35.20	27.50	22.00
G2-516	2	5/16	10	100	35.20	27.50	22.00
G2-38	2	⅜	10	100	35.20	27.50	22.00
G1-14	2, 1	¼	10	100	35.20	27.50	22.00
G1-516	2, 1	5/16	10	100	35.20	27.50	22.00
G1-38	2, 1	⅜	10	100	35.20	27.50	22.00
H10-14	1/0	¼	10	100	40.00	31.25	25.00
J20-38	2/0	⅜	10	100	46.40	36.25	29.00
K30-38	3/0	⅜	5	50	54.40	42.50	34.00
L40-38	4/0	⅜	5	50	62.40	48.75	39.00
M250-38	*	⅜	5	50	72.00	56.25	45.00

*250MCM.

SPADE TONGUE TYPE

A18-6F	22-18	#6	100	1000	$4.80	$3.75	$3.00
A18-10F	22-18	#8	100	1000	4.80	3.75	3.00
B14-6F	20-14	#6	100	2000	4.80	3.75	3.00
B14-8F	20-14	#8	100	2000	4.80	3.75	3.00
B14-10F	20-14	#10	100	2000	4.80	3.75	3.00
C10-10F	16-10	#10	50	1000	6.00	4.69	3.75
C10-14F	16-10	¼	50	1000	6.00	4.69	3.75

SELF-INSULATED SPADE TONGUE WITH INSULATION GRIP

RA18-6F	22-18	#6	100	1000	$ 7.20	$5.63	$4.50
RA18-8F	22-18	#8	100	1000	7.20	5.63	4.50
RA18-10F	22 18	#10	100	1000	7.20	5.63	4.50
RB14-6F	16-14	#6	100	1000	7.20	5.63	4.50
RB14-8F	16-14	#8	100	1000	7.20	5.63	4.50
RB14-10F	16-14	#10	100	1000	7.20	5.63	4.50
RC10-10F	12-10	#10	50	500	10.40	8.13	6.50
RC10-14F	12-10	¼	50	500	10.40	8.13	6.50

FLAG TYPE TERMINAL

AB14-6A	22-14	#6	100	500	$4.80	$3.75	$3.00
AB14-8A	22-14	#8	100	500	4.80	3.75	3.00
AB14-10A	22-14	#10	100	500	4.80	3.75	3.00
C10-6A	16-10	#6	50	500	8.80	6.88	5.50
C10-8A	16-10	#8	50	500	8.80	6.88	5.50
C10-10A	16-10	#10	50	500	8.80	6.88	5.50

TV HOOK TERMINAL

For dual conductor plastic ribbon lead-in.

A18-6TV	.025 to	#6	100	500	$5.60	$4.38	$3.50
A18-10TV	.046	#10	100	500	5.60	4.38	3.50

SELF-INSULATED RING TONGUE WITH INSULATION G

T. & B. No.	Wire Range	Stud Size	Unit Qty.	Std. Pkge.	Net per 100, Lots Below Unit Qty.	Unit Qty.	S P
RA18-6	22-18	#6	100	1000	$ 7.20	$5.63	$4
RA18-8	22-18	#8	100	1000	7.20	5.63	4
RA18-10	22-18	#10	100	1000	7.20	5.63	4
RA18-14	22-18	¼	100	1000	7.20	5.63	4
RA14-6	16-14	#6	100	1000	7.20	5.63	4
RA14-8	16-14	#8	100	1000	7.20	5.63	4
RA14-10	16-14	#10	100	1000	7.20	5.63	4
RA14-14	16 14	¼	100	1000	7.20	5.63	4
RC10-6	12, 10	#6	50	500	10.40	8.13	6
RC10-8	12, 10	#8	50	500	10.40	8.13	6
RC10-10	12, 10	#10	50	500	10.40	8.13	6
RC10-14	12, 10	¼	50	500	10.40	8.13	6
RC10-516	12, 10	5/16	50	500	10.40	8.13	6
RC10-38	12, 10	⅜	50	500	10.40	8.13	6

TY-RAP® CABLE TIES AND STRAPS

T. & B. No.	Fig.	Item	Unit Qty.	Std. Pkge.	Net per 100, Lots Below Unit Qty.	Unit Qty.	S P
TY505	B	Tie*	100	1000	$5.60	$4.40	$3
TY515	C	Strap*	100	1000	6.40	5.00	4
TY525	.....	Tie†	100	1000	8.00	6.90	5
TY535	.....	Strap†	100	1000	9.60	7.50	6

*Tool installed. †Non-tool installed.

T. & B. No. WT-183 Ty-Rap Hand Tool—Handy plier-lik for tool-installed Ty-Raps. Net Each..................$1
T. & B. No. WT-184 Ty-Rap Shoehorn—"S"-shaped metal ties two cables together. Net Each......................$1

JOINTS AND CONNECTORS

ONE-PIECE INSULATED WIRE JOINTS

Self-insulated; simple staking connects wires and insulates Bronze barrel with tough, nylon jacket. U/L listed.

T. & B. No.	Holds Wires	Unit Qty.	Std. Pkge.	Net per 100, Lots o Below Unit Qty.	Unit Qty.	S P
RB-44	3-#18, 2-#16	100	1000	$4.80	$3.75	$3
RC-55	3-#14, 4-#16	50	500	5.60	4.38	3

TWO-WAY CONNECTORS

2A18	22-18	100	1000	$ 6.00	$ 4.69	$ 3
2B14	20-14	100	1000	6.00	4.69	3
2C10	16-10	50	500	10.40	8.13	6
2D8	9-7	25	250	18.40	14.38	1
2E6	6, 5	20	200	31.60	24.69	19
2F4	4, 3	15	150	36.80	28.75	23
2G21	2, 1	5	50	64.00	50.00	40

INSULATED AIRCRAFT SPLICE (FIG. D)

Color-coded insulation; clear center inspection window. Ha positioning installing dies and positive center wire stop. listed.

2RAA	20-18	50	500	$26.40	$20.63	$1
2RBB	16 14	50	500	26.40	20.63	1
2RCC	12-10	25	250	35.20	27.50	2

SNAP-ON DISCONNECT (FIG. F)

Female fits on male tab for fast, secure assembly.

B14-250F	20-14 female	100	1000	$4.80	$3.75	$3
B14-250T	20-14 tab	100	1000	4.80	3.75	3
B14-250A	20-14 flag	50	500	5.60	4.40	3
RB14-250	Insul. coupler	50	500	8.00	6.25	5

WRISTLOCK DISCONNECT

Identical pieces have double spring pressure, strong insu grip; connects with a pull; won't jackknife. U/L listed.

B14-D	20-14	50	500	$6.40	$5.00	$4

TERMINAL TOOLS, KITS

STA-KON® HAND TOOLS

T. & B. Number	Installs Terminals for Wire Sizes	N E
WT-100	22-10 wire size	$
WT-110M	Insulation grip terms., 22-10 wire	
WT-111M	22-10 wire size	
WT-161	22-8 wire size, PT60M, PT70 and PT80	
WT-165	For TV terminal	
WT-181	RB, RC, insulated wire joints	
WT-152	RA, RB, RC	

SHURE STAKE TOOLS

WT-130	22-10 wire for A, B and C	$2
WT-145†	22-10 wire for RA, RB and RC	3

†Fig. E.

TERMINAL ASSORTMENT KITS (FIG. G)

T. & B. No. 20 Kit—Contains one carton each of A18-10, B C10-10 terminals plus WT-111M tool. Net Each........$
T. & B. No. PK-4 Insulated Sta-Kon Kit—Includes an assor of insulated ring and spade terminals and WT-152 han Net Each..$2
T. & B. No. PK-3 Aircraft M & R Kit—Contains an assortn self-insulated terminals, aircraft splicers and WT-145 han Net Each..$5

WRITE FOR INFORMATION ON GROUNDING SHEA CONNECTORS, SPECIAL TERMINALS AND CONN TORS, T. & B. KENT LINE TERMINALS, HAND A BENCH MACHINES.

Electronic Hardware

INSULATED TERMINALS‡

STANDARD STAND-OFF TERMINALS

.*	†	Net Ea.	No.	In.*	†	Net Ea.	No.	In.*	†	Net Ea.
187	6-32	15c	1422	.....	6-32	24c	1457D	.156	......	22c
250	6-32	15c	1423	.....	6-32	24c	1460A	.187	6-32	16c
312	6-32	15c	1450A	.187	6-32	21½c	1460B	.250	6-32	16c
375	6-32	15c	1450B	.250	6-32	21½c	1460C	.312	6-32	16c
187	4-40	15c	1450C	.312	6-32	21½c	1460D	.375	6-32	16c
250	4-40	15c	1450D	.375	6-32	21½c	1460E	.187	4-40	16c
312	4-40	15c	1450E	.187	4-40	21½c	1460F	.250	4-40	16c
375	4-40	15c	1450F	.250	4-40	21½c	1460G	.312	4-40	16c
...	6-32	15c	1450G	.312	4-40	21½c	1460H	.375	4-40	16c
...	4-40	15c	1450H	.375	4-40	21½c	1461	.....	6-32	16c
054	.188″	15c	1451	.....	6-32	21½c	1461A	.....	4-40	16c
094	.188″	15c	1451A	.....	4-40	21½c	1462A	.054	.188″	16c
125	.188″	15c	1452A	.054	.188″	21½c	1462B	.094	.188″	16c
156	.188″	15c	1452B	.094	.188″	21½c	1462C	.125	.188″	16c
...	6-32	15c	1452C	.125	.188″	21½c	1462D	.156	.188″	16c
...	4-40	19c	1452D	.156	.188″	21½c	1465A	.187	6-32	20c
187	6-32	19c	1455A	.187	6-32	22c	1465B	.250	6-32	20c
250	6-32	19c	1455B	.250	6-32	22c	1465C	.312	6-32	20c
312	6-32	19c	1455C	.312	6-32	22c	1465D	.375	6-32	20c
375	6-32	19c	1455D	.375	6-32	22c	1475E	.187	4-40	20c
87	4-40	19c	1455E	.187	4-40	22c	1465F	.250	4-40	20c
250	4-40	19c	1455F	.250	4-40	22c	1465G	.312	4-40	20c
312	4-40	19c	1455G	.312	4-40	22c	1465H	.375	4-40	20c
375	4-40	19c	1455H	.375	4-40	22c	1466	.....	6-32	20c
054	.188″	19c	1456	.....	6-32	22c	1466A	.....	4-40	20c
094	.188″	19c	1456A	.....	4-40	22c	1467A	.054	.188″	24c
.25	.188″	19c	1457A	.050	......	22c	1467B	.094	.188″	24c
56	.188″	19c	1457B	.094	......	22c	1467C	.125	.188″	24c
250	6-32	24c	1457C	.125	......	22c	1467D	.156	.188″	24c

MINIATURE STAND-OFF TERMINALS

250	6-32	19c	1470C	.312	6-32	23½c	1475B	.250	6-32	24½c
...	6-32	19c	1470D	.375	6-32	23½c	1475C	.312	6-32	24½c
075	.113″	19c	1470E	.188	4-40	23½c	1475D	.375	6-32	24½c
05	.113″	19c	1470F	.250	4-40	23½c	1475E	.188	4-40	24½c
35	.113″	19c	1470G	.312	4-40	23½c	1475F	.250	4-40	24½c
65	.113″	19c	1470H	.375	4-40	23½c	1475G	.312	4-40	24½c
.05	.115″	24c	1471A	.....	2-56	23½c	1475H	.375	4-40	24½c
.35	.115″	24c	1471B	.....	4-40	23½c	1476A	.....	2-56	24½c
65	.115″	24c	1472A	.075	.115″	23½c	1476B	.....	4-40	24½c
18	2-56	24c	1472B	.105	.115″	23½c	1477A	.075	......	24½c
...	2-56	24c	1472C	.135	.115″	23½c	1477B	.105	......	24½c
88	6-32	23½c	1472D	.165	.115″	23½c	1477C	.135	......	24½c
50	6-32	23½c	1475A	.188	6-32	24½c	1477D	.165	......	24½c

SUBMINIATURE STAND-OFF TERMINALS

18	.256″	♯	1485A	.125	2-56	22c	1492A	.054	.115″	24½c
..	.256″	♯	1485B	.218	2-56	22c	1492B	.094	.115″	24½c
05	.113″	22c	1485C	.125	4-40	22c	1492C	.125	.115″	24½c
35	.113″	22c	1485D	.218	4-40	22c	1492D	.156	.115″	24½c
65	.113″	22c	1486A	.....	4-40	22c	1495A	.125	2-56	25½c
25	.256″	21c	1486B	.....	2-56	22c	1495B	.218	2-56	25½c
18	.256″	21c	1487A	.054	......	22c	1495C	.125	4-40	25½c
25	4-40	21c	1487B	.094	......	22c	1495D	.218	4-40	25½c
18	4-40	21c	1487C	.125	......	22c	1496A	.....	2-56	25½c
...	4-40	21c	1487D	.156	......	22c	1497A	.054	......	25½c
...	2-56	21c	1490A	.125	2-56	24½c	1497B	.094	......	25½c
054	.115″	21c	1490B	.218	2-56	24½c	1497C	.125	......	25½c
094	.115″	21c	1490C	.125	4-40	24½c	1497D	.156	......	25½c
.25	.115″	21c	1490D	.218	4-40	24½c				
156	.115″	21c	1491A	....	2-56	24½c				

FEED-THRU TERMINALS

387	10-32	34c	1433	.875	¼-28	29c	1436	.....	⅜-32	40c
...	10-32	36c	1434	.....	¼-28	37c	1483	.....	¼-28	54c
796	5-40	29c	1435	1.312	⅜-32	37c	1484B	.105	.188″	47c

ngth. †Thread or shank dia. ‡Insulation: 1400, 1401 and 1410 phenolic; 1417, 1419 alkyd; 1450, 1451 and 1452, teflon; 1460, 1461 and 1462 alumina; all elamine. ♯Write for Price.

LOC-FIT TEFLON INSULATED TERMINALS

o a teflon grommet that fits into chassis hole. Shank, .031″ l. x .062″ dia. to fit .. board thickness.

Net Ea.	No.	Net Ea.	No.	Net Ea.	No.	Net Ea.	No.	Net Ea.
9c	4443A	9½c	4441A*	10c	4445B*	11c	4449B*†	12½c
9c	4443B	9½c	4441B*	10c	4445C*	11c	4449C*†	12½c
9c	4443C	9½c	4441C*	10c	4447A†	11c	4450A‡	22c
8c	4446A	8c	4442A*	10c	4447B†	11c	4450B‡	22c
8c	4446B	8c	4442B*	10c	4447C†	11c	4450C‡	22c
8c	4446C	8c	4444A*	11c	4448A†*	12c	4450D‡	22c
9c	4460A	9c	4444B*	11c	4448B†*	12c		
9c	4460B	9c	4444C*	11c	4448C*†	12c		
9c	4460C	9c	4445A*	11c	4449A*†	12½c		

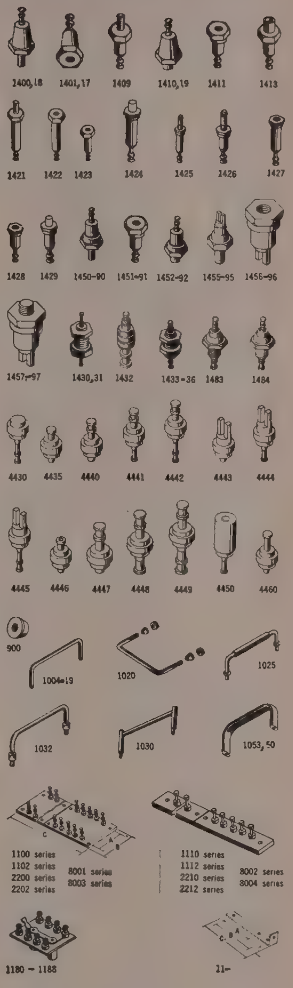
u type. †Taper pin receptacle. ‡Insulated test point.

STANDARD TERMINAL BOARDS AND BRACKETS

0 and 2200 are 5-section; Series 1180, 1-section.

A, In.	B, In.	C, In.	Net Ea.	No.	A, In.	B, In.	C, In.	Net Ea.
1.000	1.50	13.12	$1.73	2200C	.750	1.00	7.812	$2.05
1.500	2.00	13.12	1.73	2202B	.500	.75	7.812	2.19
2.000	2.50	13.12	1.83	2202C	.750	1.00	7.812	2.84
2.500	3.00	13.12	1.92	2210	.....	.312	7.812	1.00
1.000	1.50	13.12	*	2212	.....	.312	7.812	1.55
1.500	2.00	13.12	3.33	8001A	1.00	1.50	13.12	♯
2.000	2.50	13.12	3.76	8001B	1.50	2.00	13.12	♯
2.500	3.00	13.12	4.18	8001C	2.00	2.50	13.12	♯
......	.500	13.12	.78	8001D	2.50	3.00	13.12	♯
......	.500	13.12	1.36	8002	..	.500	13.12	♯
.500	.719	.875	.56	8003B	.500	.750	7.812	♯
.750	1.031	1.218	.59	8003C	.750	1.00	7.812	♯
.875	1.156	1.500	.64	8004	..	.937	7.812	♯
.500	.718	.875	.63	11-2*	1.50	.....	2⅛	.05
.750	1.031	1.218	.65	11-3*	1.50	2.00	2⅝	.08
.875	1.156	1.500	.71	11-4*	2.00	2.50	3 5/16	.0[illegible]
.500	.75	7.812	1.76	11-5*	1.50	2.00	2 13/16	.05

s for 1100B through 1100D. ♯Write for price.



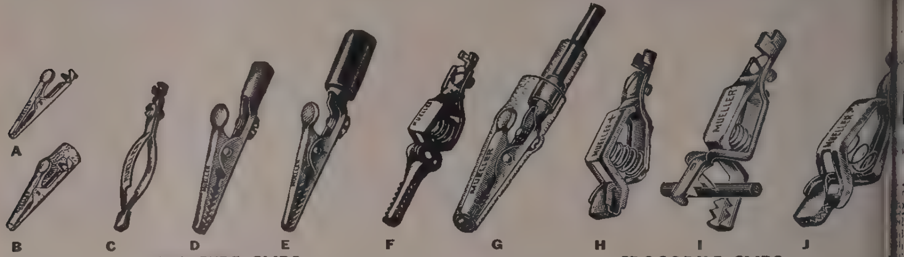
HANDLES

Chrome-plate over nickel; nickel-plate available on request.

No.	Inches*	Inches†	Net Ea.
900	Fits 1005-1017		♯
1004	6.44	1.50	$0.85
1005	6.44	1.75	.85
1007	6.00	1.50	.84
1010	4.25	1.50	.83
1012	4.00	1.50	.83
1013	4.56	1.50	.83
1015	3.00	1.50	.79
1017	2.00	1.50	.78
1018	8.00	1.50	1.05
1019	10.00	1.50	1.25
1020	45.2	1.50	.95
1025A	4-5‡	1.50	1.58
1025B	5-6‡	1.50	1.58
1030	3-6§	1.50	2.21
1032	4.00	2.435	2.25
1050	3.00	1.28	1.05
1053	9.00	1.75	1.15

*Bolt centers. †Height off panel. ‡Adjustable. §Specify length (increments of ⅛″). ♯Write for price on ferrule.

Mueller Test and Battery Clips



MINIATURE CLIPS

No. 30 Mini-gator Clips (**Fig. A**)—1$\frac{1}{16}$″ long, jaws open $\frac{5}{16}$″. Nose (with No. 32 Insulation), $\frac{11}{64}$″ OD. Cadmium plated steel. Solder connection for No. 20 or smaller wire. Strong spring, fine toothed jaws. Net Each **7c**
10 Clips for **44c**

No. 30-C Clip—Same, but solid copper. Net Each **8c**
10 Clips for **56c**

No. 32 Insulator (**Fig. B**)—High dielectric vinyl plastic. Covers Mini-gator clips to the nose. Slot permits full jaw opening without exposing teeth. Net Each **6c**
10 Insulators for **40c**

No. 88 Wee-Pee-Wee Clips (**Fig. C**)—1$\frac{11}{16}$″ Clip opens $\frac{5}{32}$″. Phosphor bronze with brass screw connection. Ideal for coils and high frequency work. Net Each **22c**
10 Clips for **$1.50**

NEW "70 SERIES" ALLIGATOR CLIPS

No. 70 Alligator Clip (**Fig. A**)—New, patented slim construction. Includes knurled thumb grip, soldering lip, and cord strain relief ears to prevent lead wire breakage. 1$\frac{11}{16}$″ long; jaws open $\frac{5}{16}$″. In production assembly, wire can be staked and ears crimped in one operation. Cadmium plated steel. Net Each **7c**
10 Clips for **44c**

No. 70-S—Similar to No. 70 above, but has screw connection, eliminating need for soldering. Net Each **8c**
10 Clips for **50c**

No. 70-CS—Same as No. 70-S but made of solid copper. Net Each **11c**
10 Clips for **75c**

"60 SERIES" ALLIGATOR CLIPS

No. 60 Alligator Clip—Cadmium plated steel, 2″ long. Slim jaws open $\frac{5}{16}$″. Has knurled thumb grip, barrel connection for banana plug, soldering lip. Spring jaw has strong hinge to prevent springing. Wire may be staked in barrel. Net Each **7c**
10 Clips for **50c**

No. 60-S (**Fig. D**)—Similar to No. 60, but with screw connection. Net Each **8c**
10 Clips for **58c**

No. 60-CS (**Fig. D**)—Same as No. 60-S, but made of solid copper. Net Each **12c**
10 Clips for **84c**

No. 60-PR2—Similar to No. 60, but adapted to fit standard phone tip or test prod tip. Net Each **10c**
10 clips for **70c**

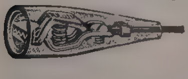
No. 60-HS (**Fig. E**)—Cadmium plated steel, 2$\frac{11}{16}$″ long. Jaws open $\frac{5}{16}$″. With red or black (specify) insulating sleeves on barrel. Screw connection. Net Each **12c**
10 Clips for **84c**

No. 60-CHS (**Fig. E**)—Same as No. 60-HS, but solid copper. Net Each **15c**
10 Clips for **$1.05**

No. 63 Completely Insulated Clip (**Fig. G**)—No. 60-S Clip with skin-tight, factory applied two-piece flexible vinyl insulation covering entire clip. Slotted insulator opens with jaw, does not expose teeth. $\frac{15}{64}$″ OD nose. Barrel takes wire or banana plug-in. Specify red or black color. Net Each **24c**
10 Clips (5 Red and 5 Black) for **$1.64**

No. 63-C Clip (**Fig. G**)—Same as No. 63, but solid copper, screw connection. State Color, Red or Black. Net Each . . . **26c**
10 Clips (5 Red and 5 Black) for **$1.80**

TEST CLIP INSULATORS



These flexible vinyl insulators fit over clips as illustrated, protect against shock, shorts, etc. Available in standard Red and Black. If Yellow, Blue, White or Green is wanted, add 10% to price. State Color.

Insulator	Use with Clip No.	Net Prices Each	Net Prices 10 for
13	11-A and 11-C	$0.85	$ 5.90
23	21-A and 21-C	.46	3.20
26	24-A and 24-C	.23	1.60
29	27 and 27-C	.15	1.00
32	30 and 30-C	.06	.40
35	33-C	2.93	20.50
47	45 and 45-C	.06	.44
49	48-B, 48-C, 50-C, 51-C	.09	.65
62	60, 60-CS, 60-S, 60-PR2	.06	.40
72	70, 70-S, 70-CS	.06	.40
74	7 mm Insulator for 95	.16	1.10
87	85, 85-C, 85-T	.06	.44
90	7 mm Insulator for 27	.16	1.10
93	88	.12	.80

CROCODILE CLIPS

No. 85 Clip (**Fig. F**)—Cadmium plated steel. 2⅛″ long. Jaws $\frac{5}{16}$″. Nesting teeth. Screw connection. For test work i close quarters. Net Each . . . .
10 Clips for . . . .

No. 85-C Clip—Same as No. 85, but solid copper, phosphor b spring and brass screw connection. No heating from hysteresis effect. Net Each . . . .
10 Clips for . . . . $

No. 85-T Tip-Clip—Same as No. 85, but with phone tip o jaw. 2⅝″ long. Use as prod, standard clip or for conne to insulated binding posts with nonremovable heads.
Net Each . . . .
10 Tip-Clips for . . . . $

GENERAL PURPOSE TEST CLIPS

No. 45 Pee-Wee Clip (**Fig. H**)—1½″ cadmium plated stee Jaws open $\frac{5}{16}$″, teeth mesh. Interlocking neck prevents offse Screw connection. Net Each . . . .
10 Clips for . . . .

No. 45-C Clip—Same as No. 45, but solid copper with pho bronze spring, brass screw connection. Jaws open ¼″
Net Each . . . .
10 Clips for . . . .

No. 48-B Test Clip (**Fig. H**)—2″ cadmium plated steel clip, open $\frac{7}{16}$″. For ignition tests, condenser tests, etc. Jaw teeth mesh. Net Each . . . .
10 Clips for . . . .

No. 48-C Clip—Same as No. 48-B, except solid copper.
Net Each . . . .
10 Clips for . . . .

No. 22 Twin Clip—Jaws at both ends. Cadmium plated 2″ long. Jaws open separately or together ½″. Screw connection. Net Each . . . .
10 Twin Clips for . . . .

No. 50-C Needle Clip (**Fig. I**)—Needle in one jaw pierces tion for positive contact without stripping wire. 2¼″ long jaws opening ½″. Solid bronze with brass screw connector.
Net Each . . . .
10 Needle Clips for . . . . $

No. 51-C Clip—Same as No. 50-C Needle Clip, but without the needle. Net Each . . . .
10 Clips for . . . . $

No. 27 Test Clip (**Fig. J**)—20 amp. capacity. Cadmium steel, 2$\frac{7}{16}$″ long. Jaws open ⅝″; teeth mesh on all three sides.
Net Each . . . .
10 Clips for . . . .

No. 27-C Clip—No. 27 in solid copper. 40 amp. capacity. Ne
10 Clips for . . . . $

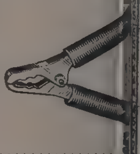
HEAVY DUTY TEST AND BATTERY CLIPS

(**Fig. H**)—For heavy duty and high amperage work. Clip "A" suffix on number are of heavy steel with lead plating with "C" suffix are solid copper. Larger clips have copp for connecting cable. Lead coated copper shunt gives sprin tection for long life. Packed 10 per carton, 5 marked + and except No. 33-C is all plain. State type wanted when o singly.

Mueller No.	Capacity Amps.	Length Inches	Jaw Opens Inches	Net Prices Each	Net Prices 10
24-A	25	2⅞	¾	$0.22	$
24-C	50	2⅞	⅞	.34	
21-A	50	4	1⅛	.40	
21-C*	100	4½	1⅛	.91	
11-A*	100	6	1¾	1.00	
11-C*	200	6	1¾	1.70	1
33-C*	300	7¾	2⅛	3.25	2

*Lug connection.

"HIPPO-CLIPS"



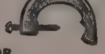
Minimum handle spread for easy grip. Jaws open 1$\frac{9}{16}$″; teeth lock on terminal in any position. Two connecting methods: (1) Use detachable copper lug supplied; or (2) solder cable directly into solder strap on other clip leg. Lead coated spring. Clinching ears grip cable insulation, prevent bending. Jaws marked + or − (specify). Vinyl insulators optional.

No. 41A Steel Hippo-Clip—100-amp. capacity. Lead plated.
Net Each . . . .

No. 41-C Solid Copper Hippo-Clip—200-amp. capacity. $
Net Each . . . .

No. 43 Insulators—Net, Pair . . . .

NO. 58 CLAMPIPE®

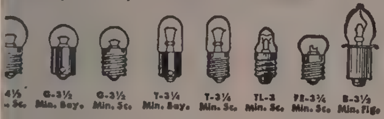


Universal ground clamp; gives 5 points of c on pipe up to 1⅜″. Case-hardened screw.
Net Each . . . .
Net for 10 Clips . . . . $

General Electric Miniature Lamps

ENERAL ELECTRIC PANEL, FLASHLIGHT, ARGON AND NEON LAMPS

PANEL, PILOT, FLASHLIGHT LAMPS



Bulb	Base	Volts	Amps	Net Price‡ Each	Net Price‡ Box 10
-3½	Min. Flanged	2.38	0.50	$0.20	$1.20
-3½	Min. Flanged	3.57	0.50	.20	1.20
-3½	Min. Flanged	2.33	0.27	.20	1.20
-3½	Min. Flanged	2.47	0.30	.20	1.20
-3½	Min. Flanged	3.7	0.30	.20	1.20
-3½	Min. Flanged	1.9	0.60	.25	1.50
-3½	Min. Flanged	......	0.15	.25	1.50
-3½	Min. Flanged	5.95	0.50	.20	1.20
-3½	Min. Flanged	4.75	0.50	.20	1.20
-3½	Min. Flanged	4.8	0.50	.20	1.20
G-3½	Min. 2-Pin	6.3	0.15	.15	.90
G-3½	Min. Screw	3.7	0.30	.17	1.02
G-3½	Min. Screw	2.47	0.30	.17	1.02
G-4½	Min. Screw	4.9	0.30	.17	1.02
G-4½	Min. Screw	6.15	0.30	.20	1.20
T-3¼	Min. Screw	6.3	0.15	.15	.90
T-3¼	Min. Screw	2.5	0.50	.15	.90
T-3¼	Min. Screw	......	0.35	.20	1.20
T-3¼	Min. Bayonet	2.5	0.50	.15	.90
T-3¼	Min. Bayonet	6.3	0.25	.15	.90
T-3¼	Min. Bayonet	3.2	0.35	.15	.90
T-3¼	Min. Screw	6.3	0.25	.15	.90
T-3¼	Min. Bayonet	6.3	0.15	.15	.90
T-3¼	Min. Screw	2.0	0.06	.15	.90
T-3¼	Min. Bayonet	2.0	0.06	.15	.90
G-3½	Min Screw	7.5	0.21	.15	.90
G-3½	Min. Screw	7.5	0.21	.20	1.20
G-3½	Min. Screw	7.5	0.21	.20	1.20
G-3½	Min. Bayonet	7.5	0.21	.15	.84
G-3½	Min. Screw	14.4	0.10	.20	1.20
G-3½	Min Bayonet	14.4	0.12	.15	.84
G-4½	Min Bayonet	7.0	0.40	.15	.84
G-4½	Min. Bayonet	14.0	0.24	.15	.84
G-4½	Min. Bayonet	14.0	0.24	.20	1.12
TL-3	Min. Screw	1.20	0.22	.17	1.02
TL-3	Min Screw	1.30	0.22	.17	1.02
TL-2¾	Special	1.2	0.20	.17	1.02
G-3½	Min. Screw	1.25	0.30	.17	1.02
G-3½	Min. Screw	1.30	0.1	.17	1.02
G-4½	Min. Screw	1.25	0 60	.17	1.02
T-3¼	Min. Bayonet	6.3	0.37	.40	2.72
TL-3	Min. Screw	2.25	0.25	.17	1.02
FE-3¾	Min. Screw	2.25	0.25	.17	1.02
TL-2¾	Special	1.2	0.20	.17	1.02
G-3½	Min Screw	2.33	0.27	.17	1.02
TL-3	Min. Screw	2.33	0.27	.17	1.02
G-3½	Min. Screw	2.46	0.50	.17	1.02
G-5½	Min Screw	2.5	0.80	.20	1.20
G-3½	Min. Screw	2.40	0.35	.20	1.20
G-3½	Min. Screw	2.65	0.30	.20	1.20
T-3¼	Min. Bayonet	2.9	0.17	.50	3.00
T-3¼	Min. Bayonet	28.0	0.17	.35	1.97
T-3¼	Min. Bayonet	28.0	0.17	.45	2.53
G-3½	Min. Bayonet	14.0	0.20	.17	1.02
G-3½	Min. Bayonet	14.0	0.20	.22	1.32
G-3½	Min. Bayonet	14.0	0.20	.22	1.32
G-3½	Min. Screw	3.69	0.50	.17	1.02
G-4½	Min. Screw	4.9	0.30	.27	1.62
G-4½	Min. Screw	5.0	0.50	.17	1.02
G-4½	Min. Screw	12.5	0.25	.17	1.02
G-4½	Min. Screw	14.0	0.25	.17	1.02
G-4½	Min. Bayonet	14.0	0.25	.17	1.02
G-4½	Min. Bayonet	14.0	0.25	.22	1.32
G-4½	Min. Screw	18.0	0.25	.17	1.02
G-4½	Min. Screw	18.0	0.25	.22	1.32
G-4½	Min. Screw	18.0	0.25	.22	1.32
G-4½	Min. Bayonet	18.0	0.25	.17	1.02
G-5	Min. Screw	14.0	0.33	.25	1.50
G-4½	Min. Screw	5.10	0.15	.17	1.02
G-4½	Min. Screw	6.15	0.50	.17	1.02
FE-3¾	Min. Screw	1.25	0.30	.25	1.50
T-4½	Min. Screw	9.84	0.50	.25	1.50
G-3½	Min. Bayonet	18.0	0.15	.20	1.12
G-3½	Min. Screw	12.0	0.20	.17	1.02
G-3½	Min. Screw	18.0	0.15	.20	1.20
G-3½	Min. Screw	14.0	0.20	.17	1.02
G-3½	Min. Screw	14.0	0.20	.22	1.32
G-5	Min. Bayonet	20.0	0.25	.17	1.02
T-3	Min. Screw	14.0	0.17	.30	1.80
T-3	Min. Screw	18.0	0.17	.35	2.10
T-3	Min. Screw	24.0	0.17	.40	2.40
T-3¼	Min. Screw	14.0	0.15	.50	3.00
G-4½	Min Screw	6.0	0.45	.20	1.20
T-3¼	Min Screw	14.0	0.20	.20	1.20
T-3¼	Min. Bayonet	14.0	0.15	.20	1.20
T-3¼	Min. Bayonet	3.2	0.16	.15	.90
T-3¼	Min. Bayonet	14.0	0.20	.20	1.20
T-3¼	Min. Bayonet	13 0	0.33	.30	1.69

PANEL, PILOT, FLASHLIGHT LAMPS (CONT.)

Lamp No.♯	Bulb	Base	Volts	Amps	Net Price‡ Each	Net Price‡ Box 10
1819	T-3¼	Min. Bayonet	28.0	0.04	$0.45	$2.53
1820	T-3¼	Min. Bayonet	28.0	0.10	.40	2.25
1822	T-3¼	Min. Bayonet	36.0	0.10	.50	3.00
1829	T-3¼	Min. Bayonet	28.0	0.07	.35	2.10
1847	T-3¼	Min. Bayonet	6.3	0.15	.20	1.20
1891	T-3¼	Min. Bayonet	14.0	0.24	.15	.90
1892	T-3¼	Min. Bayonet	14.0	0.12	.20	1.20

♯Suffix R indicates red coated bulb. †Also available in green. *Flasher Lamp. ‡Prices include Federal Excise Tax.

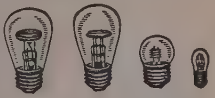
110-120 VOLT REPLACEMENT PILOT LIGHTS

Type	Description	Watts	Length	Net Each
6S6	Candelabra Base	6	1⅞"	22c
6S6	D.C. Bayonet Base	6	1⅞"	30c
3S6	Candelabra Base	3	1⅞"	35c
C7	Candelabra Base	7	2⅛"	20c
C7*	Candelabra Base	7	2⅛"	20c
Herzog	Candelabra Base	4	1⁹⁄₁₆"	39c

*Has white glass envelope, all others have clear glass envelopes. **Type 10S6**—Replacement Pilot Light as above, except for use in 230-volt circuits. Candelabra screw base. 10 watts. 1⅞" long Net Each **52c**

NEON GLOW LAMPS

Low-voltage lamps of the gaseous discharge type. For use as pilots and indicators in industrial apparatus. Screw base lamps have the required resistor, for operation on the rated voltage, included within the lamp base. Bayonet base lamps not equipped with resistors.



Lamp No.	Watts	Volts (Circ.)	Bulb	Base	Res.* Ohms	Net Per One	Net Per 10
NE-2	1/25	110-125	T-2	Wire Term.	200K†	$0.10	$ 0.80
NE-2A	1/25	110-125	T-2	Wire Term.	200K†	.10	.80
NE-2B	1/10	110-125	T-2	Wire Term.	62K†	.10	.80
NE-2AR6G	1/10	110-125	T-2	Wire Term.	62K♯	.17	1.36
NE-2AR10	1/15	110-125	T-2	Wire Term.	100K♯	.15	1.20
NE-2AR20	1/25	110-125	T-2	Wire Term.	200K♯	.15	1.20
NE-2BR6B	1/10	110-125	T-2	Wire Term.	62K♯	.17	1.36
NE-2BR10	1/15	110-125	T-2	Wire Term.	100K♯	.15	1.20
NE-2E	1/10	110-125	T-2	Wire Term.	62K†	.10	.80
NE-2F	1/10	110-125	T-2	Wire Term.	62K†	.10	.80
NE-2H	¼	110-125‡	T-2	Wire Term.	25K†	.12	.96
NE-2X	1/10	110-125	T-2	Wire Term.	62K†	.09	.72
NE-2HR2	¼	110-125‡	T-2	Wire Term.	25K♯	.17	1.36
NE-2R6A	1/10	110-125	T-2	Wire Term.	62K♯	.19	1.52
NE-17	¼	110-125	T-4½	DC Bay.	30K†	.90	7.20
NE-30	1	110-125	S-11	Med. Scr.	7½K§	1.20	9.60
NE-32	1	110-125	G-10	DC Bay.	7½K†	1.20	9.60
NE-34	2	110-125	S-14	Med. Scr.	3½K§	1.85	14.80
NE-40	3	110-125	S-14	Med. Scr.	2.2K§	2.70	21.60
NE-45	¼	110-125	T-4½	Cand. Scr.	30K§	.85	6.80
NE-48	¼	110-125	T-4½	DC Bay.	30K†	.70	5.60
NE-51	1/25	110-125	T-3¼	Min. Bay.	200K†	.21	1.68
NE-56	1	220-250	S-11	Med. Scr.	33K§	1.25	10.00
NE-57	¼	110-125	T-4½	Cand. Scr.	30K§	.99	7.92
NE-58	½	220-250	T-4½	Cand. Scr.	100K§	.95	7.60

Resistor: *Series; †Supplied and attached by user; ♯External attached; §Built-in, internal. ‡AC, all others DC.

CIRCUIT COMPONENT NEON LAMPS

Circuit control component lamps for use as voltage indicators, regulators, switching or triggering elements, calculating machines, memory and logic matrices, etc. All ratings below are DC; all bulb types are T-2 except: NE-3 which is T-2 round; NE-16, T-4½; NE-67, T-3¼.

Lamp No.	Starting Volts DC	Operating Volts DC	Ma	Base	Net Price Each	Net Price 10
NE-2S	59-90	44-74	0.3	Wire Leads	$0.20	$1.60
NE-23	70 Avg.	59 Avg.	0.3	Wire Leads	.16	1.28
NE-3	Under 90	Over 55	0.3	Tel. Slide	.63	5.04
NE-4	70 Avg.	59 Avg.	0.3	Tel. Slide	.40	3.20
NE-16	87 Max.	48-67	2.0	DC Bay	.63	5.04
NE-67	64 Avg.	56 Avg.	0.2	Min. Bay	.20	1.60
NE-68	60-90	52-65	0.3	Wire Leads	.40	3.20
NE-75	Under 90	Over 55	0.4	Wire Leads	.50	4.00
NE-76	68-76	50-58	0.4	Wire Leads	1.05	8.40
NE-77*	....	....	0.5	Wire Leads	.55	4.40
NE-80	60-80	50-58	0.1	Wire Leads	.63	5.04
NE-81	64-80	50-60	0.3	Wire Leads	.57	4.56
NE-82	62-78	50-60	1.5	Wire Leads	†	†
NE-97	110-140	60-80	0.5	Wire Leads	†	†

*Three-element lamp. †Write for prices.

ARGON INDICATOR LAMPS

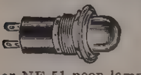
Lamp No.	Watts	Volts (Circ.)	Bulb	Base	Res.* Ohms	Net Per One	Net Per 10
AR-1	2	110-125	S-14	Med. Scr.	3½K§	$1.90	$15.20
AR-3	¼	110-125‡	T-4½	Cand. Scr.	15K§	.85	6.80
AR-4	¼	110-125‡	T-4½	DC Bay.	15K†	.75	6.00
AR-9	1/25	110-125	T-2	Wire Term.	200K†	.20	1.60

Resistor: *Series; †Supplied and attached by user; ♯External attached; §Built-in, internal. ‡AC, all others DC.
Prices Include Federal Excise Tax.

Dialco Pilot Light Assemblies

NEON INDICATOR LIGHTS

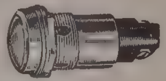
Now also available with new High Brightness NE-51H Neon Glow Lamp. Have Patented Built-in Resistor.



Two Types Available: Series 95408 enclosed neon indicator light has 56,000-ohm, ⅓-watt resistor built in for use with the regular NE-51 neon lamp on 105-125 volt circuit. Series 95408H has built-in resistor of 18,000 ohms for use with new NE-51H high brightness neon lamp on 105-125 v. AC circuits or DC circuits of 160 volts. Rugged design; resistor fully insulated in molded bakelite. Plastic head gives 180° light spread. Lens holder and mounting bushing are white nickel plated. Comes with steel hex nut, and internal tooth lockwasher with iridite protective coating over cadmium plate. Solder terminals. Size, 2 1/16" long, 15/16" O.D.; mounts in 11/16" hole in panels up to ⅜" thick. U/L and CSA listed. Shpg. Wt., 3 oz. Less lamp. **For High Brightness version, add suffix H to stock number (Example, 95408H-931).**

Dialco No. 95408-931—Red. Net Each **97c**
Dialco No. 95408-933—Amber. Net . . **97c**
Dialco No. 95408-935—White. Net . . . **97c**
Dialco No. 95408-937—Clear. Net . . . **97c**

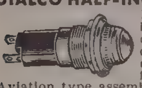
DIALCO NEON SERIES 31914



Enclosed assemblies for use with NE-45 neon glow lamps with candelabra screw base for 105-125 volt circuits. Replaceable from front of panel. Convex lens in choice of colors has friction-fit lens holder of polished chrome finish. Nickel plated mounting bushing. Iridite coated, cadmium plated steel hex mounting nut and split lockwasher. Binding screw terminals. Size, 2½" long, 1 3/16" O.D.; mounts in 1" hole. U/L and CSA listed. Shpg. Wt., 4 oz. Less lamp.

Dialco No. 31914-111—Red. Net . . **$1.03**
Dialco No. 31914-113—Amber.
Net Each **$1.03**
Dialco No. 31914-135—Opal. Net. **1.03**
Dialco No. 31914-117—Clear. Net. **1.03**

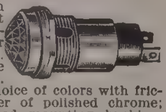
DIALCO HALF-INCH SERIES 81410



For use with T-3¼ bulb, miniature bayonet base incandescent, for 2-55 volt circuits. Replaceable from front of panel. Aviation type assembly with socket shell encased in molded bakelite. Smooth face jewels in ½" brass lens holder. Holder and mounting bushing are white nickel plated. Iridite coated, cadmium plated steel hex nut and internal-tooth lockwasher supplied. Solder terminals. Size, 2¼" long, 15/16" O.D.; mounts in 11/16" hole in panels up to ⅜" thick. U/L and CSA listed. Shpg. Wt., 3 oz. Less lamp.

Dialco No. 81410-111—Red. Net . . . **97c**
Dialco No. 81410-112—Green. Net . . . **97c**
Dialco No. 81410-113—Amber. Net . . **97c**
Dialco No. 81410-135—White. Net . . . **97c**

ENCLOSED ASSEMBLIES
DIALCO ONE-INCH SERIES
314001



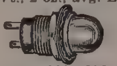
Series for use with S-6 incandescent bulbs with candelabra screw base for 6-125 volt circuits. Lamp replaceable from front of panel. Faceted lens in choice of colors with friction-fit lens holder of polished chrome; white nickel plated mounting bushing. Iridite coated, cadmium plated steel hex nut and split lockwasher. Solder terminals. Size, 2 25/32" long, 1 3/16" O.D.; mounts in 1" hole. U/L and CSA listed. Shpg. Wt., 4 oz. Less lamp.

Dialco No. 314001-431—Red. Net. **$1.03**
Dialco No. 314001-432—Green.
Net Each **$1.03**
Dialco No. 314001-433—Amber.
Net Each **1.03**
Dialco No. 314001-437—Clear. Net **1.03**

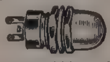
You will find the complete listing of bulbs and lamps to fit these assemblies on another page of this catalog. See Index.

NEW SUBMINIATURE SERIES

Extra compact assemblies for use with T-1¾ bulbs for 1.3-28 volts. Caps unscrew for bulb replacement from front of panel. Military grade phenolic assures permanent isolation from ground; all connections, lamp and socket fully insulated from bushing and panel. Rugged brass structure finished in black nickel. Lockwasher and nut supplied. Size, 1⅜" long, ¾" O.D. Shpg. Wt., 2 oz., avg. Less lamp.



Series 101-5030
Front Mounting



Series 101-3830
Back Mounting

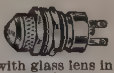
TWO-TERMINAL PLASTIC DOME TYPES

Series 101-5030 Front Mount and Series 101-3830 Back Mount: Front mounting units mount in 17/32" hole; back mounting units, in 15/32" hole. Solder terminals.

Any Model—
Net Each **$1.24**

Front Mtg. No.	Color	Back Mtg. No.
101-5030-951	Red	101-3830-951
101-5030-952	Green	101-3830-952
101-5030-973	Amber	101-3930-973
101-5030-975	White	101-3830-975

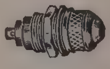
DIALCO TWO-TERMINAL NON-DIMMING SERIES 111-3830



Rugged, general purpose with glass lens in metal holders; unscrew for easy lamp replacement. Frosted lens except as otherwise noted. Internal tooth lockwasher and nut; solder terminals. Size, 1 11/32" long, ⅝" O.D.; mounts in 15/32" hole. Shpg. Wt., 1½ oz. Less lamp.

Dialco No.	Lens Color	Net Each
111-3830-111	Red	$1.56
111-3830-112	Green	1.56
111-3830-113	Amber	1.56
111-3830-135	White*	1.56
111-3830-117	Clear	1.56

*Translucent unfrosted lens.



DIALCO 1-TERMINAL NON-DIMMING TYPES

With Binding Screw or Solder Terminal

For grounded circuits; meet applicable MIL specs. Frosted lens unless otherwise noted. Size, 1 11/32" long, ⅝" O.D.; mounts in 15/32" hole. Shpg. Wt., 1½ oz. Less lamp.

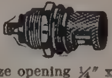
Any Model—Net Each **$1.24**

Binding Screw No.	Color	Solder Term. No.
8-1830-111	Red	8-1930-111
8-1830-112	Green	8-1930-112
8-1830-113	Amber	8-1930-113
8-1830-135	White*	8-1930-135
8-1830-117	Clear	8-1930-117

*Translucent unfrosted lens.

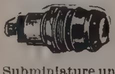
DIALCO 1-TERMINAL LIGHT SHIELD UNITS

Two Types of Terminals



For grounded circuits. Size opening ¼" x 5/16" for light on panels. Size, 1 5/32" long, ⅝" O.D.; mounts in 15/32" hole. Shpg. Wt., 1½ oz. Less lamp.

Dialco No. 4-1830—
Screw terminal. Net Each **$1.59**
Dialco No. 4-1930—Solder terminal.
Net Each **$1.59**



TT-61 AND TT-62 FOR PLASTIC PLATE EDGE-LIGHTING

Subminiature units for MIL-P-7788 plastic plate panels, per mil. drawing MS25010-1A to 8A. Size, 1 7/16" long, 1⅛" O.D.; mounts in 15/32" hole. Shpg. Wt., 2 oz. Less lamp.

Any Model—
Net Each **67c**

Solder Terminal No.	Filter	Screw Terminal No.
TT-61	Red	TT-62
TT-61-B7	Clear	TT-62-B7
TT-61-R1	Red*	TT-62-R1
TT-61-C7	Clear*	TT-62-C7

*With light-emitting top.

DIALCO DATALITES*

**Ultra-Miniature Indicator Lights
Computers, Data Processing Equipm
Automation, etc. Mount in ⅜"**
"Datalites" are made in two basic
With Dialco's lamp cartridges, whic
replaceable; and with built-in neon
which are permanent, not replaceable

*Reg. T

SINGLE LAMP HOLDER

Use with Dialco's lamp cartridge, removable from front. Size, 1 13/16" long, ½" O.D., less cartridge; mounts in ⅜" hole. Two insulated terminals offset for correct polarity when replacing cartridges in DC circuits. Conform to applicable MIL specs. Collar, flange ring and mounting bushing are of aluminum with black anodized finish. Comes complete with mounting hardware, less cartridge. Shpg. Wt., 2 oz.

**No. 753
Lamp Hol**

plus—

**Dialco La
Cartridg
makes—**

**Complete D
DATALITE**

Dialco No. 7538 Lamp Holder— **$2**
Net Each . . . .
20 or more—Net Each **$1**

NEON LAMP CARTRIDGES

For use with No. 7538 Lamp Hold

Consists of NE-2E neon bulb, 1/25 watt, with starting 65 v. AC and 90 v. DC; mounted in alumi
sleeve, capped with plastic stovepipe
Requires ⅛ watt ballast resistor.
1 19/64" long, 21/64" O.D. Shpg. Wt.,
Lens is transparent.

Dialco No.	Lens Color	Net Each One	2
38-931	Red	$1.40	$0
38-933	Yellow	1.40	
38-935	White	1.40	
38-937	Clear	1.40	

INCANDESCENT LAMP CARTRIDG

Uses T-1¾ incande
bulb mounted in a
num sleeve and c
with short cylind
lens. **Specify Volt**
Numbers listed ar
standard 6 v. cartri
for other voltages c
-6- to -14- or -28-.
1 7/64" long, 21/64" O.D.
Wt., 1 oz. Lens is translucent.

V.	A.	Hrs.
6	.20	500
14	.08	750
28	.04	1000

Dialco Number	Lens Color	Net Each One	20
39-6-1451	Red	$2.04	$1
39-6-1452	Green	2.04	1
39-6-1473	Yellow	2.04	1
39-6-1474	Blue	2.04	1
39-6-1475	White	2.04	1

HOT STAMPED LEGENDS

Cylindrical lenses can be hot-stamped
1 or 2 digits or letters in black.
Hot Stamping—Net Each . . . .
20 or more, Net Each . . . .

DATALITES WITH PERMANENT LA

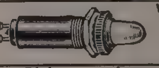
Neon Glow Lamp Built-In, Not Replaceable

Built-in, rugged NE-2E neon lam
quires ballast resistor, also available
in. Lightweight aluminum design;
stovepipe lens. With mtg. hardware
built-in lamp; two fully insulated
minals. Conform to applicable MIL
Mounts in ⅜" hole.

WITHOUT BUILT-IN RESISTOR

1 25/64" long, ½" O.D.; 1½ oz.

Dialco Number	Lens Color	Net Each One	20
249-7840-931	Red	$1.75	$1
249-7840-933	Yellow	1.75	1
249-7840-935	White	1.75	1
249-7840-937	Clear	1.75	1



WITH BUIL 100K OHM RESISTOR

1 53/64" lon
½" O.D.; 2

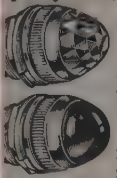
Dialco Number	Lens Color	Net Each One	20
249-7841-931	Red	$2.16	$1
249-7841-933	Yellow	2.16	1
249-7841-935	White	2.16	1
249-7841-937	Clear	2.16	1

alco Pilot Light Assemblies

TIGHT ASSEMBLIES

vy Duty Industrial Applications

1" SERIES



Enclosed rugged design gasketed with oilproof gaskets impervious to oil, water and dust. Rugged binding screw terminals. Caps unscrew from face of panel. One-piece, solid brass mounting bushing; solid rled lens holder; chrome finish. is gives omnidirectional (180°) ad. High impact phenolic insula- , $1\frac{7}{8}$" long, $1\frac{3}{16}$" O.D. Mounts in ice hole. Shpg. Wt., 3 oz., aver- lamp.
el—Net Each.......... $2^{20}

556 INCANDESCENT LAMPS

Torpedo Faceted Lens

Base	Lens	For Bayonet Base
1331	Red	103-3502-1331
1332	Green	103-3502-1332
1333	Amber	103-3502-1333
1334	Blue	103-3502-1334
1335	White*	103-3502-1335
1336	Yellow	103-3502-1336
1337	Clear	103-3502-1337

TYPE LENS (FROSTED BACK)

1211	Red	103-3502-1211
1212	Green	103-3502-1212
1213	Amber	103-3502-1213
1214	Blue	103-3502-1214
1235	White*	103-3502-1235
1216	Yellow	103-3502-1216
1217	Clear	103-3502-1217

ent unfrosted.

R NEON GLOW LAMPS

ith NE-45 candelabra screw base esistor built into lamp base. Size, , $1\frac{3}{16}$" O.D. Fits 1" clearance hole. ., 3 oz. Less lamp.

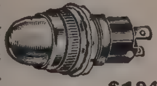
Number	Lens Color	Net Ea.
14-1231	Red	$2.20
14-1233	Amber	2.20
14-1236	Yellow	2.20
14-1237	Clear	2.20
14-1217	Clear*	2.20

back.

DEL 1316-L ADAPTER SET

reducer for adapting any 1" ilot light assembly to $1\frac{3}{16}$" hole. us to oil, water, and dust. Weight,
o. 1316-L—Net Each..... 73^{c}

11/16" SERIES



e Lenses
or Plain
ilt-in re- ize, $2\frac{9}{64}$" $\frac{}{16}$" O.D. in $\frac{11}{16}$" pg. Wt., s lamp.
lel—Net Each.......... $1^{94}

NE-51 NEON GLOW LAMP

Lens	Color	Plain Lens
-1191	Red	125-408-1131
-1193	Amber	125-408-1133
-1196	Yellow	125-408-1136
-1197	Clear	125-408-1137
....	Clear*	125-408-1117

back.

W-VOLTAGE T-3¼-MINIATURE AYONET BASE LAMP

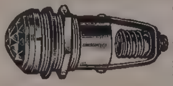
Lens	Color	Frosted Back
-1191	Red	125-410-1111
-1192	Green	125-410-1112
-1193	Amber	125-410-1113
-1194	Blue	125-410-1114
-1195	White	125-410-1135*
-1196	Yellow	125-410-1116
-1197	Clear	125-410-1117

cent unfrosted.

OPEN SOCKET ASSEMBLIES

DIALCO ONE-INCH SERIES 75

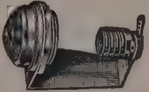
DETACHABLE LAMP SOCKET



Candelabra base, 115 volt pilot light assembly with faceted jewel in highly polished chrome plated brass holder. For standard bulbs. Requires hole of 1-inch diameter for mounting. Easily adjusted to panel thickness. Less bulb. Shipping Weight, 5 oz.

Dialco No. 75C-431—Red. Net Ea.. 83^{c}
Dialco No. 75C-432—Green. Net.... **83c**
Dialco No. 75C-433—Amber. Net.... **83c**

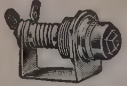
DIALCO SERIES 31-18-16 ONE-INCH REMOVABLE JEWEL



Candelabra base, 115 volt pilot light assembly with faceted jewel in highly polished chrome plated brass holder. For standard bulbs. Requires 1" mounting hole. Solder terminals. Easily adjusted to panel. Secured to panel by separate bushings into which the lens holders are a friction fit, permitting removal for lamp replacement.

Dialco No. 31-18-16-431—Red. Net. 83^{c}
Dialco No. 31-18-16-432—Green. Net **83c**
Dialco No. 31-18-16-433—Amber.
Net Each........................... **83c**

DIALCO SERIES 810 HALF-INCH REMOVABLE JEWEL



For operation with low volt, miniature bayonet and miniature screw base, incandescent lamps. Burnished nickel finish. Requires $\frac{11}{16}$ in. mounting hole. Faceted lens. Solder terminals. Effective lens diameter ½". All brackets are insulated from the live terminals. Unit secured by separate bushings from which caps may be removed easily for access to the lamps. Less bulb.

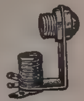
MINIATURE BAYONET BASE

Dialco No. 810B-431—Red.
Net Each........................ 32^{c}
Dialco No. 810B-432—Green. Net... **32c**
Dialco No. 810B-433—Amber. Net... **32c**

MINIATURE SCREW BASE

Dialco No. 810M-431—Red.
Net Each........................ 32^{c}
Dialco No. 810M-432—Green. Net... **32c**
Dialco No. 810M-433—Amber. Net.. **32c**

DIALCO SERIES 510-710 ANGLE BRACKET ASSEMBLY



Economical space saver. For low volt operation of incandescent miniature lamps. With solder terminals. White nickel finish. Mounting hole $\frac{7}{16}$" diameter. Effective lens diameter ⅜". Angle bracket units are secured to the panel by the threaded shank of the lens holder and lamps are accessible only from back of panel. Convex lens. Less bulb.

SERIES 510 MINIATURE SCREW

Dialco No. 510-121—Red.
Net Each........................ 21^{c}
Dialco No. 510-122—Green. Net..... **21c**
Dialco No. 510-123—Amber. Net.... **21c**

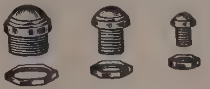
SERIES 710 MINIATURE BAYONET

Dialco No. 710-121—Red.
Net Each........................ 21^{c}
Dialco No. 710-122—Green. Net..... **21c**
Dialco No. 710-123—Amber. Net.... **21c**

You will find the complete listing of bulbs and lamps to fit these assemblies on another page of this catalog. See Index.

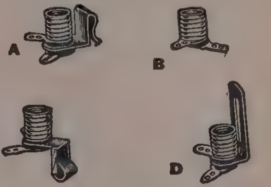
LENSES IN THREADED HOLDERS FOR PANEL MOUNTING

For use with separately mounted lamp sockets. All-purpose smooth jewels in polished nickel-plated brass holders for up to $\frac{5}{16}$" panels. ¾", ½" and $\frac{11}{16}$" diameters—requiring $\frac{11}{16}$", $\frac{7}{16}$" and ⅜" holes, respectively, for mounting. Shpg. Wt., 2 oz.



Size, In.	Dialco No.			Net Ea.
	Red	Green	Amber	
¾	25006-111	25006-112	25006-113	39c
½	10006-621	10006-622	10006-623	14c
$\frac{11}{16}$	5006-621	5006-622	5006-623	20c

BRACKET MOUNTED SOCKETS



Cadmium plated brackets with tinned brass lugs. Bayonet type furnished with coil spring construction for positive contact. Highest grade insulated washers. Available for miniature screw or bayonet types and for candelabra base. Average Shipping Weight, 2 oz.

MINIATURE SCREW TYPE

Dialco No.	Type Fig.	Net Each	10 For	100 For
501	A	7c	65c	$5.75
507	B	7c	65c	5.75
504	C	7c	65c	5.75
505	D	7c	65c	5.75

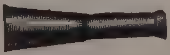
MINIATURE BAYONET TYPE

Dialco No.	Type Fig.	Net Each	10 For	100 For
701	A	9c	74c	$6.60
707	B	9c	74c	6.60
704	C	9c	74c	6.60
705	D	9c	74c	6.60

CANDELABRA TYPE, 115 VOLT

Dialco No.	Type Fig.	Net Each	10 For	100 For
601	A	12c	$1.00	$9.10
607	B	12c	1.00	9.10
604	C	12c	1.00	9.10
605	D	12c	1.00	9.10

PILOT BULB REMOVER

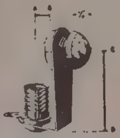


For fast and simple removal and installation of miniature and candelabra lamps. Facilitates mass production, indispensable for hard-to-reach places. Will not damage lamps. Made of high-grade rubber. Shipping Weight, 2 oz.
Dialco No. L-73—Net Each....... 26^{c}

The assemblies listed are only a few of the more popular types. Dialco manufactures every type of assembly for any purpose and we can supply the complete line. Write for information on any types not listed.

Sockets & Jewel Assemblies

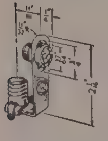
½″ JEWEL—NO. 10 TYPE



For No. 10 and 10B, miniature screw or bayonet base of any voltage (tubular preferred). Use type G3½ bulb for No. 10G. Mounts in 7/16″ hole on panels up to ¼″ thick. JEWEL: diamond cut (faceted); amber, blue, yellow, green, ruby, milk white. Smooth or frosted jewels also available. SPECIAL FINISHES: Chrome, Black Nickel, Statuary Bronze. No. 10B has slotted holes to permit adjustment for best position of jewel.

Drake No.	Socket Style	Net Each 1-9	10-49	50-99
10	Min. Screw	25c	23c	21c
10B	Min. Bayonet	25c	23c	21c
10G	Min. Bayonet	25c	23c	21c

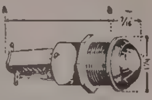
NO. 10C TYPE



An inexpensive candelabra screw base jewel light assembly that is Underwriters Approved for 75 watt 125 volt service. Especially suited for applications involving minimum space behind panel, and replacement from front is not necessary. Mounting bracket has slotted hole to facilitate adjustment for placing lamp filament directly behind the jewel. Mounts in 7/16″ hole, thicknesses up to ¼″. Will house any candelabra screw lamp. COLORS: Amber, Blue, Colorless, Green, Ruby, White and Yellow. Jewel assembly is burnished nickel. All other parts cadmium. Glass finishes available: Faceted, smooth plain, smooth frosted; smooth frosted back.

1-9, Net Each	29c
10-49, Net Each	26c
50-99, Net Each	24c

1 INCH JEWEL NO. 75 TYPE

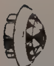


Has a "slip-fit" bezel. All parts burnished cadmium plated except bezel which has a highly polished chrome finish. Mounts in 1″ diameter hole on panels up to ½″ thick. **Rating:** Nos. 175 and 275 are tested on 110 volts. No.75 will with-stand a voltage breakdown of 1000 v. **Lamps:** The No. 75 is designed to house Mazda 115 volt, 6 watt, S6 or C7 candelabra screw base lamps. Will house any other candelabra screw base lamp up to 1⅞″ long and ⅞″ in diameter. The Nos. 175 and 275 are designed to house any miniature lamps up to 1 3/16″ long x ⅞″ diameter. **Disc Colors:** Amber, Blue, Colorless, Green, Red, White, Yellow.

Drake No.	Socket Style	Net Each 1-9	10-49	50-99
75*	Candelabra	84c	76c	70c
75†		82c	73c	68c
75#		93c	84c	78c
175*	Min. Screw	86c	78c	72c
175†		91c	82c	76c
175#		95c	85c	79c
275*	Min. Bayonet	87c	78c	73c
275†		91c	82c	76c
275#		95c	86c	80c

*With colored glass, no disc. †With crystal SFB glass and color disc. #With crystal SFB glass and six assorted color discs and retaining ring.

½″ JEWELS

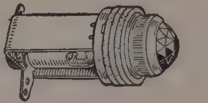


Slotted or threaded; faceted, smooth or frosted. Amber, Blue, Crystal, Green, Ruby, Milk White, Yellow, Nickel Plated or special finishes.

Drake No.	Shank Lght.	O.D.	Net Each 1-9	10-49	50-99
16-17*	⅜″	7/16″	15c	13c	12c
23	5/16″	⅜″	13c	12c	11c

*With nut.

NO. 50 TYPE

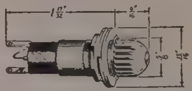


½″ Jewel—Horizontal Mounting

Designed for use on more than one thickness of panel. Supplied with two fiber washers which compensate for panel thicknesses. No. 50 mounts on panels 0″-¼″ thick; No. 50S mounts on panels 0″-¼″ thick. Both require an 11/16″ dia. hole. **Lamps:** Miniature T3¼ tubular, G3½ globular or other lamps of same overall length. Lamp removable from front. **Jewel:** Faceted, Amber, Blue, Crystal, Green, Ruby, White and Yellow. Available in Chrome, Black Nickel or Bronze finishes on special order.

Drake No.	Socket Type	Net Each 1-9	10-49	50-99
50	Min. Bayonet	53c	48c	44c
50S	Min. Screw	52c	47c	43c

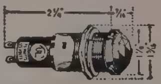
NEON LAMP SOCKETS TYPE NO. 101N



These totally enclosed pilot lights meet Underwriters' specifications. They are very rugged and particularly adapted to use in equipment subjected to extreme vibration and atmospheric conditions. The 101N assembly is designed for use with the NE51 neon glow lamp. With proper current limiting resistors (built into the socket of the 101N) the neon glow lamps can be operated at any voltages over 65 volts AC and 90 volts DC. Merely specify the operation voltage. Stock units have 100,000 ohm resistors for 115 volt operation. 1/25 watt. The transparent plastic cap is fluted on the inside to multiply the images of the glowing electrodes of the neon lamp. It actually has three times the visibility of the ordinary plain cap. It is advisable to use the dome with 180° visibility. **No. 101** and **100** will house No. 47 incandescent lamp or any other miniature bayonet T3¼ lamp of less than 1 watt power consumption. Equipped with a translucent cap. **Mounting:** Mounts in 11/16″ hole on panels up to ⅜″ thick. Breakdown voltage, 2000 volts. **Transparent Colors:** Amber, Colorless, Red, Milky White. **Translucent Colors:** Blue, Green, Red, Milky White and Yellow. **Plating:** Burnished nickel plated panel hardware.

Drake No.	Cap Style	Net Each 1-9	10-49	50-99
101N	Fluted Dome	70c	63c	58c
101	Plain Dome	58c	52c	48c
100	½″ Jewel	62c	56c	52c

1 INCH JEWEL NO. 75AP TYPE



Heavy duty candelabra screw base assembly designed to be used on rugged equipment. Panel hardware highly finished chrome plate. All other parts cadmium plated. Underwriters' Approved for 125 volt, 75 watt service. Connections made to solder terminals. **Mounting:** 1″ dia. hole on panels up to ½″ thick. **Lamps:** Designed to house Mazda 115 volt, 6 watts, S6, candelabra screw base lamp. Will house any other lamp of same base which has length of less than 1⅞″ and dia. of less than ⅞″. Will not house C7 bulbs. **Colors:** Amber, Blue, Colorless, Green, Ruby, Milk White, Yellow. Faceted, smooth or frosted jewels available.

Drake No. 75AP—List Price	$1.66
1-9, Net Each	$1.00
10-49, Net Each	.90
50-99, Net Each	.83

¾″ JEWEL—NO. 60 TYPE

Has a ¾″ jewel in a polished chrome "slip-fit" bezel. Supplied with three fibre washers which compensate for panel thickness. Its sturdy construction, ease of mounting, and small s make it an ideal assembly.

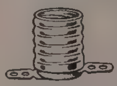
SPECIFICATIONS

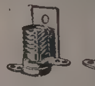
Mounting: Mounts in 13/16″ diameter h on panels 0″ to ¼″ thick. **Rating:** M iature bayonet and screw types are tes on 110 volts. Candelabra screw types withstand a voltage breakdown of 1 volts. **Colored Discs:** The No. 60 t are regularly supplied with color smooth glass frosted on back beh which is placed a colored disc. The adv tage of this method is that the glass pears white until the lamp is lig **Colors:** Amber, Blue, Colorless, Gr Red, White, or Yellow. **Glass:** Avail in faceted; smooth plain (no frosti smooth, frosted on back only. Smo plain glass recommended for use w neon glow lamps.

Drake No.	Socket Style	Net Each 1-9	10-49	50
60*	Min. Bayonet	77c	69c	6
60†		76c	68c	6
60#		87c	78c	7
60N	For NE45	85c	76c	7
60S*	Min. Screw	76c	69c	6
60S†		75c	68c	6
60S#		86c	78c	7
60T*	T4½ Candelabra	86c	77c	7
60T†		90c	81c	7
60T#		92c	83c	7

*With colored glass, no disc. †With cry SFB glass and color disc. #With cry SFB glass and six assorted color discs retaining ring.

DIAL LIGHT ASSEMBLIES


117H


109AH

109C

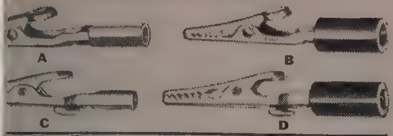
Socket Types: 100 series—miniature screw; 200 series—miniature bayonet; 400 series—candelabra screw; 600 series single contact candelabra bayo **Bracket Types:** Last two digits of T Number indicate type of mounting br et: **03**—Flanged Clip Bracket; **04** Clip Bracket; **06**—Flat Bracket, 29/32″ slot; **08**—Flat Bracket, 1¼″ long slot; Flat Bracket, #8 screw hole; **17**— only. **Bracket and Lug Positions:** Bracket alongside socket; **C**—Bra away from socket; **E**—Lugs 60° apart; Lugs 180° apart. (These letters are t added to Type Number ordering AH, CE or CH).

Drake Type	Net Per 100 1-9	10-49	50-
103	$8.40	$7.00	$6.
104	8.40	7.00	6.
106	8.40	7.00	6.
108	8.40	7.00	6.
109	8.40	7.00	6.
117H	8.40	7.00	6.
156B	8.40	7.00	6.
203	9.00	7.50	6.
204	9.00	7.50	6.
206	9.00	7.50	6.
208	9.00	7.50	6.
209	9.00	7.50	6.
217H	9.00	7.50	6.
256B	9.00	7.50	6.
403	9.60	8.00	7.
404	9.60	8.00	7.
406	9.60	8.00	7.
408	9.60	8.00	7.
409	9.60	8.00	7.
417H	9.60	8.00	7.
456B	9.60	8.00	7.
617H	9.60	8.00	7.

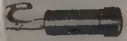
WE HAVE THE COMPLETE DRA PILOT LIGHT LINE. PLEASE WRI FOR INFORMATION ON UNLIST ITEMS AND FOR INDUSTRI QUANTITY PRICES.

H. Smith Components

ALLIGATOR CLIPS

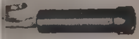


ith No.	Fig.	Description	Each
	A	Steel	5c
	B	Insulated Steel	8c
	C	Steel with screw	6c
	D	Insulated Steel with screw	10c
	C	Copper with screw	9c
	D	Insulated Copper with screw	13c



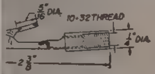
ALLIGATOR CLIP COMBINATION JACK

alligator clip with combination jack in rear of handle. accommodate standard phone tip plugs or banana plugs. 9/16" long overall length 3". Available in Black and Red ecify color.
ith No. 305—Net Each........................ **39c**



ALLIGATOR CLIP PHONE TIP JACK

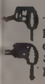
alligator clip with phone tip jack in rear of handle. portion will accommodate all standard phone tip plugs. " long, overall length 2⅝". Available in Black and Red ecify color.
ith No. 304—Net Each........................ **33c**



ALLIGATOR CLIP ADAPTER

Adapts standard solderless tips to alligator clips.
H. H. Smith No. 310—Net **15c**

METER TIP TEST LEAD



Test Leads with 50" rubber covered kinkless test lead wire. Molded Plastic finger-grip tips on one end and 5" plastic test prod handles on other end. Supplied in two types, solderless tip or needle tip prod handles.

H. H. Smith No.	Type	Net Price Per Pair
625	Solderless prods	$1.35
626	Needle tip prods	1.35

SOLDERLESS TIP TEST LEADS

Fibre handles colored Red and Black 4" long x ⅜" diameter. Flexible rubber covered wire leads 50" long also colored Red and Black.

H. H. Smith No.	Type	Net Price Per Pair
600	Phone tips	$0.87
601	Spade lugs	.87
602	Alligator clips	.93

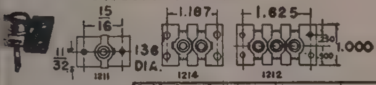
PHONO NEEDLE TEST LEADS

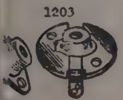
H. H. Smith No.	Type	Net Price Per Pair
613	Phone tips	$0.87
614	Spade lugs	.87
615	Alligator clips	.93

PHONO PLUGS

RCA Type phono plugs. For use with record players, recording and reproducing equipment, etc. Extra large hole in cap (.175") for coaxial cable.
H. H. Smith No. 1201—Long Pin (1" overall). Net Each........................ **5c**
H. H. Smith No. 1202—Short Pin (13/16" overall). Net Each........................ **5c**

PHONO JACKS

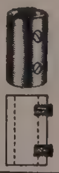




H. H. Smith No.	Description	Each
1203*	Single Jack	6c
1223	Single Jack	7c
1211	Single Jack	7c
1214	Double Jack	10c
1212	Triple Jack	12c

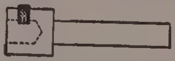
*On 1/16" Bakelite, 11/16" centers.

BRASS AND INSULATED COUPLINGS



Available in both brass and insulated material. Overall length ¾", O.D. 7/16". Set screws are provided in coupling for tightening to shaft.

H. H. Smith No.	Type	Material	Net Each
120	¼"-¼"	Brass	$0.16
140	¼"-¼"	Insulated	.15
131	⅜"-¼"	Brass	.16
141	⅜"-¼"	Insulated	.15
133	⅜"-⅜"	Brass	.16
142	⅜"-⅜"	Insulated	.15



BRASS AND INSULATED EXTENDERS

Extra long extenders in either brass or insulated material. Suitable for use on amplifiers, television receivers, radio receivers or wherever a ¼" shaft extender is required.

H. H. Smith No.	Type	Material	Shaft Length	Overall Length	Net Each
150	¼"-¼"	Brass	1⅜"	1¾"	$0.20
130	¼"-¼"	Insulated	1⅜"	1¾"	.20
132	⅜"-¼"	Brass	1⅜"	1¾"	.20
134	⅜"-¼"	Insulated	1⅜"	1¾"	.20

BRASS BUSHINGS CADMIUM PLATED

These brass bushing are ideal for use in raising sub panels, chassis, condensers, transformers, etc. Hole in bushing to accommodate a No. 6 or No. 8 screw.

For No. 6 Screw		¼" O.D.	For No. 8 Screw	
H.H.S. No.	Net Per C	Length	H.H.S. No.	Net Per C
2100	$3.30	¼"	2105	$3.30
2101	4.35	⅜"	2106	4.35
2102	5.28	½"	2107	5.28
2103	6.30	¾"	2108	6.30
2104	7.20	1"	2109	7.20

⅜" O.D.

For No. 6 Screw		Length	For No. 8 Screw	
2110	$5.28	¼"	2115	$5.28
2111	6.30	⅜"	2116	6.30
2112	7.20	½"	2117	7.20
2113	8.25	¾"	2118	8.25
2114	9.30	1"	2119	9.30

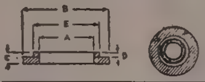
THREADED BRASS BUSHINGS

Threaded 6-32		¼" O.D.	Threaded 8-32	
2120	$3.90	¼"	2125	$3.90
2121	4.95	⅜"	2126	4.95
2122	6.00	½"	2127	6.00
2123	7.20	¾"	2128	7.20
2124	8.25	1"	2129	8.25

INSULATED BUSHINGS

For No. 6 Screw		¼" O.D.	For No. 8 Screw	
2130	$3.90	¼"	2140	$3.90
2131	4.95	⅜"	2141	4.95
2132	6.00	½"	2142	6.00
2133	7.20	¾"	2143	7.20
2134	8.25	1"	2144	8.25

FIBRE SHOULDER WASHERS



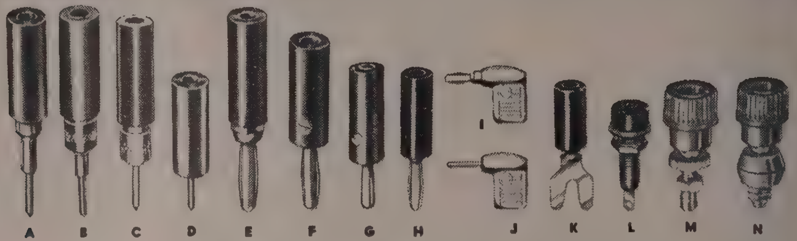
A. Inside Diameter
B. Outside Diameter
C. Thickness Overall
D. Height of Shoulder
E. Diameter of Shoulder

H.H.S. No.	A	B	C	D	E	Net Per M
2150	.140	.375	.093	.031	.237	$6.90
2151	.110	.250	.062	.031	.187	5.70
2152	.136	.250	.093	.031	.187	6.00
2153	.136	.312	.093	.031	.187	6.60
2154	.250	.500	.068	.028	.312	7.20
2155	.172	.375	.093	.031	.246	6.60
2156	.196	.375	.093	.031	.308	6.60
2157	.375	.750	.093	.031	.500	8.70
2158	.385	.625	.093	.031	.500	8.40
2159	.265	.500	.097	.031	.365	7.20

FLAT FIBRE WASHERS

H.H.S. No.	For Screw-(I.D.)	O.D.	Thickness	Per M
2160	#6-.136	.250	1/16	$ 5.70
2161	#4-.110	.250	1/16	5.70
2162	#6-.140	.375	1/16	5.10
2163	#8-.172	.375	1/16	5.10
2164	#10-.196	.375	1/16	5.10
2165	¼"-.250	.500	1/16	5.40
2166	¼"-.250	.500	3/32	5.70
2167	5/16"-.312	.500	1/16	5.40
2168	⅜"-.385	.625	1/16	6.60
2169	⅜"-.375	.750	1/16	8.40

H. H. Smith Components, Accessories



PLUGS, JACKS AND ACCESSORIES

Insulated Phone Tip and Banana Plugs are supplied with molded handles and molded heads in colors (**RED, BLACK, YELLOW, GREEN, BLUE OR WHITE**). Please specify color desired when ordering.

INSULATED PHONE TIP PLUG (HEAVY DUTY) (Fig. A)—1" handle, 2 1/8" overall length. Deep solder well.
H. H. Smith No. 229—Net Each . . **15c**

INSULATED SOLDERLESS TIP PLUG, JR. (Fig. B)—1" handle, 2 1/4" overall length.
H. H. Smith No. 200—Net Each . . **15c**

INSULATED SOLDERLESS TIP PLUG, JR. (Fig. C)—1" handle, 2" overall length.
H. H. Smith No. 201—Net Each **15c**

INSULATED SHORT PHONE TIP (Fig. D)—1" handle, 1 17/32" overall length
H. H. Smith No. 203—Net Each . . **12c**

INSULATED BANANA PLUG (SPRING TYPE) (Fig. E)—1" handle, 1 15/16" overall length. Internal set screw for soldering phosphor bronze or beryllium copper spring.
H.H. Smith No. 212 Phos. Br.—Net Each **21c**
H. H. Smith No. 242 Ber. Cop.—Net . **30c**

INSULATED BANANA PLUG. SPRING TYPE (Fig. F)—1" handle, 1 11/16" overall length. Solderless side set screw.
H. H. Smith No. 204—Net Each . . **18c**

INSULATED BANANA PLUG. SPLIT TYPE (Fig. G)—1" handle, 1 9/16" overall length. Solderless side set screw.
H. H. Smith No. 213—Net Each . . **18c**

INSULATED BANANA PLUG. SPRING TYPE (Fig. H)—1" handle, 1 3/4" overall length. Internal set screw for soldering.
H. H. Smith No. 211—Net Each **18c**

MOLDED METER BANANA TIP PLUG (Fig. I)—Specify Red or Black.
H. H. Smith No. 255—Net Each . . **36c**

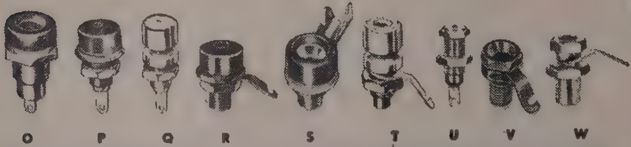
MOLDED METER TIP PLUG (Fig. J)—Specify Red or Black.
H. H. Smith No. 235—Net Each . . **27c**

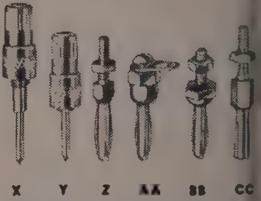
INSULATED SPADE LUG (Fig. K)—handle, 1 5/8" overall length. Specify or Black.
H. H. Smith No. 218—Net Each . . 1
H. H. Smith No. 129—Lug only. In lots of ten. Net Price 1

INSULATED COMBINATION JA
(Fig. L)—Use with either phone banana plug. Mounts in 5/16" hole.
H. H. Smith No. 206—Net Each . . 1

5-WAY BINDING POST (GROUND TYPE) (Fig. M)—1 1/4" overall. Sp Red or Black.
H. H. Smith No. 220—Net Each . . 2
H. H. Smith No. 280—With Metal insert in head. Net Each 3

5-WAY COMBINATION BINDING PO
(INSULATED TYPE) (Fig. N.)—overall. Specify Red or Black.
H. H. Smith No. 260—Net Each . . 3
H. H. Smith No. 290—With metal insert in head. Net Each 3





NYLON ALL-INSULATED TIP JACK (FIG. O)—1" overall length. Mounts in 3/8" hole.
H. H. Smith No. 240—Net Each . . **18c**

INSULATED TIP JACK (STANDARD) (Fig. P)—1 1/64" overall length. Mounts in 5/16" hole.
H. H. Smith No. 202—Net Each . . **13c**

NYLON INSULATED PHONE TIP JACK WITH NYLON INSULATED WASHER (Fig. Q)—1" overall length. Mounts in 5/16" hole.
H. H. Smith No. 241—Net Each . . **18c**

INSULATED BANANA JACK (Fig. R)—21/32" overall length. Mounts in 5/16" hole.
H. H. Smith No. 205—Net Each **13c**

INSTRUMENT BANANA JACK (Fig. S)—37/64" overall length. Mounts in 5/16" hole.
H. H. Smith No. 219—Net Each **15c**

NYLON INSULATED BANANA JACK WITH NYLON INSULATED WASHER (Fig. T)—53/64" overall length. Mounts in 5/16" hole.
H. H. Smith No. 221—Net Each . . **18c**

METAL TIP JACK (Fig. U)—Mounts in 1/4" hole.
H. H. Smith No. 107—Net Each . . **10c**

BANANA JACK (Fig. V)—Mounts in 1/4" hole.
H. H. Smith No. 101—Net Each . . **10c**

BANANA JACK (Fig. W)—Mounts in 1/4" hole.
H. H. Smith No. 109—Net Each . . **10c**

SOLDERLESS PHONE TIP, SR. (Fig. X)—1 5/8".
H. H. Smith No. 105—Net Each . . **10c**

SOLDERLESS PHONE TIP, JR. (Fig. Y)—1 3/16" long.
H. H. Smith No. 106—Net Each . . **10c**

BANANA PLUG (SPRING TYPE) (Fi—1 3/8" overall length. Threaded 6-32 x 1/2".
H. H. Smith No. 103—Net Each . . 1

BANANA PLUG (SPRING TYPE) AA)—1 1/32" overall length. Screw in
H. H. Smith No. 100—Net Each 1

BANANA PLUG (SPRING TYPE) BB)—1 1/4" overall length. Thre 6-32 x 3/8".
H. H. Smith No. 102—Net Each . 1

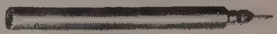
BANANA PLUG (SPLIT TYPE) (Fig.—1 1/4" overall length. Threaded 6-32
H. H. Smith No. 104—Net Each 1

SOLDER TYPE PHONE TIP (FIG.
H. H. Smith No. 108 (Standard)—In Lots of 10. Net Price 2
H. H. Smith No. 123 (Large ID)—In lots of 10. Net Price 2
H. H. Smith No. 158 (Hollow Tip)—In lots of 10. Net Price 1

SOLDERLESS TEST PRODS

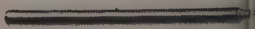
Threaded Solderless Tip With Chuck—Specify Red or Black.
H. H. Smith No. 302—5 1/4" overall. Net Each **30c**
H. H. Smith No. 303—6 3/4" overall. Net Each **33c**

PHONO NEEDLE PRODS



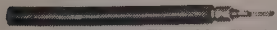
Threaded Needle Chuck and Collar—Specify Red or Black.
H. H. Smith No. 317—5" overall. Net Each **30c**
H. H. Smith No. 318—6 3/8" overall. Net Each **33c**

HEAVY DUTY TEST PRODS



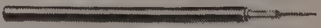
Threaded Heavy Duty Phone Specify Red or Black.
H. H. Smith No. 319—5 1/4" overall. Net Each 3
H. H. Smith No. 329—6 3/4" overall. Net Each 3

FIBRE SOLDERLESS



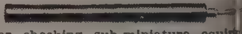
Threaded Solderless Tip with Chuck. Specify Red or Black.
H. H. Smith No. 323—Net Each . . **24c**

SOLDERLESS PHONO NEEDLE



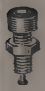
Double Bakelite lacquered handles. Sharp, pointed phono needle. Stud for solderless connection, 7 3/16" overall. Specify Red or Black.
H. H. Smith No. 313—Net Each . . **72c**

SUB-MINIATURE



For checking sub-miniature equip Bone fibre handle, 1/4" O.D., 4 11/16" length. Specify Red or Black.
H. H. Smith No. 322—Net Each . 2

F. Johnson Jacks and Plugs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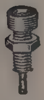
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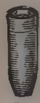
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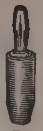
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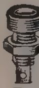
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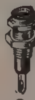
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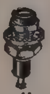
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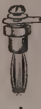
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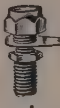
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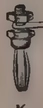
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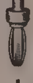
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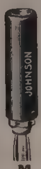
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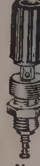
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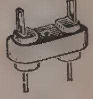

O

›N PLUGS AND JACKS

:s (Fig. A)—Withstand high volt-
ıperatures. For Wire to 16 ga.
, ⅞″ long head. 9/16″ long pin.
05-300—Add color number* to
n ordering. Net Each...... **16c**

s (Fig. B)—Voltage breakdown
DC. Capacity to ⅛″ panel, 2 μμf.
ated beryllium copper contact.
n 17/64″ hole; ¼″-32 nut. 29/32″ long

05-600—Add color number* to
n ordering. Net Each...... **25c**

s (Fig. C)—Voltage breakdown
DC. Capacity to ⅛″ panel, 2 μμf.
ted phosphor bronze contact.
n 17/64″ or double flat hole.
05-800—Add color number* to
n ordering. Net Each...... **13c**

Plugs (Fig. E)—Body and pin
el plated brass with nickel silver
Body ⅞″ long; pin 17/32″ long.
08-300—Add color number* to
n ordering. Net Each...... **21c**

Jacks (Fig. F)—Fully insulated
ack; body molded of low-loss
ow-loss characteristics retained
xtreme temperature and humid-
age breakdown, 12,500 v. DC;
to 1/16″ panel only 1.5 μμf. Cad-
ted insert. Takes banana plugs of
diameter of .175″. Single 5/16″-32
ating in 21/64″ hole. No additional
hardware needed.
08-900—Add color number* to
n ordering. Net Each...... **14c**

AND SLEEVE ASSEMBLY (FIG. D)

p Jacks without mounting nut
inside threaded nylon insu-
eeve. For patch cords or where
nection of panel mounted jack
nsulated. Sleeve 1 1/16″ lg., ⅜″ dia.
05-700—Add color number* to
n ordering. Net Each...... **30c**

TAL CLAD TIP JACKS

oof nylon and metal construction;
ip or crack. Highly resistant to
of temperature and moisture.
ated, machined brass jacket pro-
on body, assures positive fasten-
ounting. Continuous current rat-
nps. Internal silver plated contact,
n head. Takes .081″ dia. tip plugs.
n 17/64″ hole. ¼″-32 nut furnished.
acity to ⅛″ panel, 3.8 μμf.
d Series 105-251-1 thru 105-263-1
—Formed silver plated phosphor
ontact. Voltage breakdown, 7000
Add color number* to -250 when
Net Each................ **18c**

al Series 105-201-100 thru 105-
Fig. H)—Nickel plated phosphor
ock washer. Machined beryllium
contact, silver plated; hot tin
erminal end. Voltage breakdown,
DC. Add color number* to -200
dering. Net Each.......... **30c**

Series 105-201-200 thru 105-
(Fig. H)—Complies with MS-
MIL-STD-242A. Heavy nickel
orass jacket (meets QQ-N-290).
ulation resistance of nylon body
IL-P-17091. Machined beryllium
contact, silver plated; hot tin
erminal end. Voltage breakdown,
DC. With tin plated phosphor
ock washer. Add color number* to
en ordering. Net Each...... **35c**

*COLOR NUMBERS

Color	No.	Color
hite	8	Brown
ed	9	Light Green
ack	10	Dark Blue
ark Green	11	Ivory
ght Blue	12	Violet
ange	13	Gray
ellow		

STANDARD BANANA PLUGS

Advanced design; accurately machined brass studs extend full length of pins for extra strength. Corrosion-resistant nickel silver springs. Bodies and hardware 0.0001 nickel plated. Nos. 108-770 and 108-771 are jumbo types. No. 108-754 designed for riveting, has beryllium copper springs and is cadmium plated. Solder terminals furnished.

Johnson Number	Fig.	Length	Thread	Net Each
108-750	K	1⅛″	6-32	**13c**
108-750-2	K	1½″	6-32	**14c**
108-753	I	15/16″	6-32	**14c**
108-754	L	13/16″	....	**9c**
108-770	K	1 25/32″	¼-28	**30c**
108-771	I	1⅛″	10-32	**34c**

INSULATED BANANA PLUGS (FIG. M)

Standard and Jumbo insulated banana plugs with nickel plated brass bodies and nickel silver springs. Nos. 108-752-1 and 108-752-2 are standard size; the former with black and the latter with red plastic handle. Nos. 108-772-1 and 108-772-2 are jumbo size with black and red plastic handles respectively.

Johnson Number	Length (Overall)	Tip Lgth.	Cord Diam.	Net Each
108-752-1	2⅛″	17/32″	7/32″	**36c**
108-752-2	2⅛″	17/32″	7/32″	**36c**
108-772-1	2 25/32″	¾″	⅜″	**48c**
108-772-2	2 25/32″	¾″	⅜″	**48c**

Johnson Banana Plugs can be furnished with beryllium copper springs, plated nickel, cadmium or silver if desired. Miniature solder type plugs also available. Orders for these must be of sufficient quantity for economical runs.

STANDARD BANANA JACKS (FIG. J)

Quality, nickel plated jacks of machined brass. Supplied with solder terminals and hex nuts. No. 108-745-1 supplied with red plastic head molded integral with body; No. 108-745-2 has black plastic head; both provided with fibre insulating washers. No. 108-760 is for use with jumbo plugs.

Johnson Number	Lgth.	Hole Diam.	Thread	Net Each
108-740	⅝″	.166″	¼″-28	**12c**
108-745-1	21/32″	.166″	¼″-28	**22c**
108-745-2	21/32″	.166″	¼″-28	**22c**
108-760	1″	.277″	⅜″-24	**31c**

SOLDERLESS PHONE TIP PLUGS

Available in two types of tips. Knurled body and sleeve permit leads to be firmly secured without soldering. Body and sleeve are of nickel plated brass. Either type is for use with all standard tip jacks.

No. 105-15—Has 13/16″ pin with the last ½″ of tip 0.081″ diameter.
Net Each........................... **18c**

No. 105-415—Same as 105-15 except tip is 9/16″ long and diameter is 0.081″ throughout its length.
Net Each........................... **17c**

HEADLESS TIP JACK

Economical headless jack for molded plastic instrument cases or insulated jack strip panels where jack body can be screwed into tapped panel. Body has hex shoulder for tightening. Threaded ¼″-32. Cadmium plated beryllium copper contact. Jack is 13/16″ long overall.

No. 105-1—Net Each.............. **11c**

HEX HEAD TIP JACK

All metal construction with nickel plated brass body. Contacts are cadmium plated beryllium copper. Threaded ¼″-32. Supplied with one extruded washer, one flat washer and nickel plated nut. Mounts in ⅜″ hole.

No. 105-417—Net Each........... **18c**

NYLON "SIX-WAY" BINDING POST (FIG. N)

Compact, completely insulated, pre-assembled 6-way binding post. Body molded of tough, durable low-loss nylon. Retains low loss characteristics through extremely wide temperature range and high relative humidity conditions. Insulation resistance greater than 200 megohms after MIL-T-5422B humidity test. Voltage breakdown 8000 v. DC; capacity to ⅛″ panel, 3.3 μμf; current carrying capacity, 15 amperes. Shank is silver plated brass—thumb nut is self-captivated and cannot be removed. Connection is made at the solder stud, or a lug may be slipped over the threaded portion and secured with a nut. Single 5/16″-32 nut for mounting; no auxiliary mounting hardware needed. Mounts in 21/64″ hole, "D" hole or double flat hole. Post diameter, 7/16″. Diameter of conducting column, .166″, with .086″ diameter hole drilled into it. Depth behind panel (overall), 53/64″.

Net Each (see table for No.).......... **30c**

Model	Color	Model	Color
111-101	White	**111-108**	Brown
111-102	Red	**111-109**	Lt. Green
111-103	Black	**111-110**	Dk. Blue
111-104	Dk. Green	**111-111**	Ivory
111-105	Lt. Blue	**111-112**	Violet
111-106	Orange	**111-113**	Gray
111-107	Yellow		

CERAMIC CONNECTORS AND CRYSTAL SOCKETS (FIG. O)

Steatite connectors for low capacity, high voltage and high temperature operation. May be used as crystal sockets, antenna relay connectors, VFO input connectors, antenna plugs, or AC line connectors. Glazed steatite L4 or better, DC-200 impregnated. Contacts spaced .486″ for pins .051″ diam., ¼″ long. Capacity between terminals is less than 1.5 μμf with socket engaged. Mounting hole, ⅛″ dia., provided for strain relief cord. Breakdown 5000 volts; 10 ampere carrying capacity. Female connector will accept a type HC-6/U crystal holder.

Johnson Number	Type	Contacts	Net Ea.
126-105	Female	Phosphor bronze	**16c**
126-105-2	Female	Beryl. copper	**19c**
111-99	Male	Silver-pl. brass	**21c**

HEAVY DUTY TIP JACKS

Plastic head molded integral with nickel plated brass body. Cadmium plated beryllium copper contacts. For military, heavy duty and industrial installations. Complete with extruded shoulder washer, extra phenolic washer and nickel plated hex nut. 5/16″-40 thread. ½″ plastic head. Jack is 31/32″ long. Available in Red and Black only.

No. 105-418 (Red) or
105-419 (Black)—Net Each....... **25c**

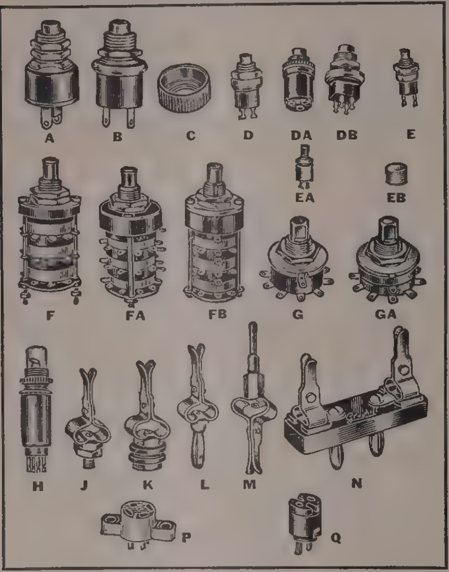
PLASTIC HEAD TIP JACKS

General purpose jack has specially formed cadmium plated, beryllium copper contact that grips tip plug along almost entire length. Has large, easy wiring terminal with solder barrier and plenty of space for several wires. Body is nickel plated, threaded ¼″-32. Supplied with extruded shoulder bushing and nickel plated hex nut. Mounts in ⅜″ hole. Maximum panel thickness 5/32″ where insulating washers are used, ¼″ where omitted. Plastic head ½″ diameter in choice of colors. Jack is ⅞″ long.

Net Each (See table below for No.) . **18c**

Model	Color	Model	Color
105-520	Red	**105-526**	Orange
105-521	Black	**105-527**	Yellow
105-522	Dk. Green	**105-528**	Lt. Green
105-524	Brown	**105-529**	Dk. Blue
105-525	Lt. Blue	**105-530**	Ivory

Grayhill Switches, Clips, Sockets



PUSH-BUTTON SWITCHES

Housing, button and internal bridge of molded phenolic per MIL-M-14, Type CFG.

SERIES 2000 SNAP-ACTION SWITCH (FIG. A)

Momentary contact, SPST. Rated 10 amps., 115 v. AC, resistive. Distinct click at moment of actuation. 15/32"-32 mounting bushings; two hex nuts. Rated life, 50,000 operations. Recommended for manual operation only.

No. 2201—Normally open; red button. Net Each.........$1.85
No. 2202—Normally closed; black button. Net Each.....**$1.85**

SERIES 4000 SILENT ACTION SWITCH (FIG. B)

Non-snap, momentary contact, SPST. Rated ½ amp., 115 v. AC, resistive. 15/32"-32 mounting bushing; hex nut. Rated life, 500,000 operations. For manual operation only.

No. 4001—Normally open; red button. Net Each.........70c
No. 4002—Normally closed; black button. Net Each.......**70c**

BUTTON GUARD (FIG. C)

For Series 2000 and 4000. Protects buttons against accidental operation and damage. Threads onto 15/32"-32 mounting bushing. Cadmium-plated brass.

No. 10C1015—Net Each..............................25c

SERIES 23-1 SILENT ACTION MINIATURE (FIG. D)

Non-snap, momentary contact, SPST. Rated ¼ amp., 115 v. AC, resistive. 5/16"-32 mounting bushing; hex nut. Rated life, 500,000 operations. Overall length, 1 3/64"; maximum diameter, ½".

No. 23-1—Normally open; red button. Net Each.........85c

SERIES 34 SOLDERLESS WIRING SWITCH (FIG. DA)

Non-snap momentary SPST for taper-pin solderless wiring. Three "jacks" at rear (with short between two of them) takes A-MP #53 taper pins. ⅜"-32 bushing, with nut and washer.

No. 34-1—Red button. Net Each......................$1.35

SERIES 35 DOUBLE POLE SWITCH (FIG. DB)

Momentary DPST-NO rated ½-amp. 115 v. resistive. Expectancy 100,000 manual operations. Molded phenolic housing, with 15/32"-32 bushing. Solder terminals.

No. 35-1—Red button. Net Each......................$1.20

SERIES 30-1 SILENT ACTION SUB-MINIATURES (FIG. B)

Non-snap, momentary contact, SPST. Rated 0.10 amp., 115 v. AC, resistive. ¼"-32 mounting bushing. Rated life, 500,000 operations. Overall height, 63/64"; max. dia., ⅜".

No. 30-1—Normally open; red button. Net Each.........95c
No. 30-2—Normally closed; black button. Net Each.......**95c**

SERIES 39-1 ULTRA-MINIATURE SWITCH (FIG. EA)

Non-snap, SPST momentary contact rated 0.10 amp., 115 v. AC, resistive. Life over 1 million operations. Overall height, 19/32"; ¼" O.D.

No. 39-1—Normally open; red button. Net Each........$1.00

LIGHTED PUSH-BUTTON SWITCH (FIG. H)

Light circuit is independent of switch circuit; uses NE2 bulb. Normally open, momentary contact. Rated 1 amp. Rated life, 500,000 operations or more. Bushing, ⅜-32. Overall length, 1 27/32"; maximum diameter, 7/16".

No. 40-1—Net Each..................................$2.00

BUTTON CAPS (FIG. EB)

Attach to Series 30 or 39 switches with adhesive. Molded of thermosetting plastic. Specify black, dark blue, light blue, dark green, light green, pink, gray, white, yellow, or red.

No. 30B1012—Specify color. Net Each.................10c

TAP AND ROTARY SWITCHES

SERIES 5000 MINIATURE TAP SWITCHES (FIGS. F AND G)

Rated 1 amp., 115 v. AC, resistive. Will carry 5 amps. as a selecto switch only. Non-shorting (break before make) or shorting (mak before break) available; add "S" to number when ordering shortin type. Standard switches have 1-6 decks, with 2-10 positions pe deck; 7-10 deck switches on special order. Ten-position switche rotate continuously in either direction; nine-position or les switches have stop allowing rotation only through desired posi tions. Contact positions on 36° indexing. Studs on 5-10 dec switches extend ¼" at rear for double end mounting to preven twisting. ⅜"-32 mounting bushing; hex nut. Max. dia., 1⅛ Specify number of decks, number of positions and shorting o non-shorting type when ordering.

No. of Decks	Positions Per Deck								
	2	3	4	5	6	7	8	9	10
1*	$1.30	$1.35	$1.40	$1.45	$1.50	$1.55	$1.60	$1.65	$1.7
2♯	3.00	3.10	3.20	3.30	3.40	3.50	3.60	3.70	3.8
3†	3.65	3.80	3.95	4.10	4.25	4.40	4.55	4.70	4.8
4§	4.30	4.50	4.70	4.90	5.10	5.30	5.50	5.70	5.9
5**	4.95	5.20	5.45	5.70	5.95	6.20	6.45	6.70	6.9
6‡	5.70	6.00	6.30	6.60	6.90	7.20	7.50	7.80	8.1

Overall length back of panel: *15/16"; ♯1¼"; †1 21/32"; §2 1/16"; **2 15/1 ‡2⅞".

SERIES 12 MINIATURE TAP SWITCHES (FIGS. F AND G)

Same as Series 5000, except: Soldered terminals at junction o contact rivet and solder lug to insure complete reliability unde extreme environmental conditions. When ordering, specify numbe of decks, number of positions and shorting or non-shorting type 1-6 decks, 2-10 positions standard; 7-10 decks available o special order.

No. of Decks	Positions Per Deck								
	2	3	4	5	6	7	8	9	10
1	$1.45	$1.50	$1.55	$1.60	$1.65	$1.70	$1.75	$1.80	$1.8
2	3.30	3.40	3.50	3.60	3.70	3.80	3.90	4.00	4.1
3	3.95	4.10	4.25	4.40	4.55	4.70	4.85	5.00	5.1
4	4.60	4.80	5.00	5.20	5.40	5.60	5.80	6.00	6.2
5	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00	7.2
6	6.00	6.30	6.60	6.90	7.20	7.50	7.80	8.10	8.4

SERIES 24 MINIATURE TAP SWITCHES (FIGS. FA AND G

Same as Series 5000 except: Positive detent action; better "feel" For both commercial and military use. When ordering, speci number of decks, number of positions and shorting or non-shorti type. 1-6 decks, 2-10 positions standard; 7-10 decks available special order.

No. of Decks	Positions Per Deck								
	2	3	4	5	6	7	8	9	10
1*	$2.90	$3.00	$3.10	$3.25	$3.35	$3.45	$3.55	$3.65	$3.
2♯	4.30	4.40	4.50	4.60	4.75	4.85	4.95	5.05	5.1
3†	5.00	5.15	5.30	5.45	5.65	5.80	5.95	6.15	6.
4§	5.70	5.90	6.10	6.30	6.55	6.80	7.05	7.30	7.
5**	6.40	6.65	6.90	7.15	7.45	7.75	8.05	8.35	8.
6‡	7.15	7.45	7.75	8.05	8.40	8.75	9.10	9.45	9.

Overall length back of panel: *0.969"; ♯1.391"; †1.766"; §2.14 **2.516"; ‡2.891".

SERIES 24 SPRING RETURN ROTARY SWITCHES (FIG. FB)

Spring return rotary, same as Series 24, except gives momenta contact on either side of center position only. Up to three deck shorting or non-shorting; add "S" for shorting type.

No. 24101—1 deck. Net Each...........................$4.2
No. 24102—2 decks. Net Each.........................**$5.0**
No. 24103—3 decks. Net Each.........................**5.8**

TEST CLIPS

SERIES 2 PANEL MOUNT CLIPS

No. 2-0 Threaded Stud for Laminated Panels (**Fig. J**)—For fa testing when mounted on test board panel. Leads easily slipped i and out of clamp-type jaws. Adjustable spring action. Two hex mounting nuts. Net Each.............................20

No. 2-4 Threaded Stud Insulated for Metal Panels (**Fig. K**)— Same as No. 2-0 but with two molded phenolic washers to insulate clip from panel. Net Each.....................35

No. 2-1 Banana Plug Clip (**Fig. L**)—For use on "Q" meters an similar precision test equipment with irregularly spaced jacks. Net Each.....................................35

No. 2-6 Pin Plug Clip (**Fig. M**)—Same as No. 2-1 except for use with pin jacks..............................35

No. 2-2 Plug-in Adaptor (**Fig. N**)—Designed for testing resistor capacitors and similar pig-tail type components on standard te equipment. Banana plugs spaced at ¾" centers. Molded phenol board MIL-M-14, type CFG. Nickel-plated brass clips and plugs. Net Each................................$1.4

No. 2-7 Plug-in Adapter—Same as No. 2-2, except adjustable ¾ to 1¼" banana plug centers; molded Mil-M-14, type CGF phenolic. Net Each.................................$1.5

No. 2-8 Screw-down Adapter—Same as No. 2-2, but fixed pan mount for screw fastening; solder terminals at each end. Net Each...80

SPECIAL PURPOSE SOCKETS

TRANSISTOR SOCKET (FIG. P)

Designed for JETEC 30 packaging. Leads fit on 100 MIL grid fo printed circuit. Socket fits ⅜" hole, fastened with rivets or # screws. Terminal numbers molded into bottom of socket; top fac has key rib for alignment with transistor tab. Wrap-around con tacts of silver-plated beryllium copper with gold flash. Molde mica-filled phenolic base per MIL-M-14, Type MFE.

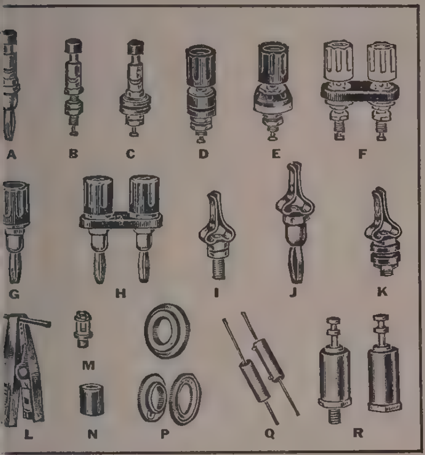
No. 22-11—Net Each.................................35

PENCIL TUBE SOCKET (FIG. Q)

Accepts two tube pins .020" dia. on .115" centers. Terminals a silver-plated beryllium copper with gold flash. Molded, mica-fille phenolic base per MIL-M-14, Type MFE.

No. 22-3—Net Each..................................35

rayhill Binding Posts, Clips, Jacks



BINDING POSTS AND PLUGS

SERIES 29 PLUNGER TYPE

w, spring-loaded post designed for positive connection. To oper- depress button, place lead in slot and release button; spring ssure makes firm, positive contact. Nickel plated brass with NC-1 threaded stud; molded phenolic button cap. Post ex-ds ¾″ above mounting panel. Red or black cap; other colors ilable on special order.

29-100R (Red), **No. 29-100B** (Black) (**Fig. A**)— Each 35c

29-101R (Red), **No. 29-101B** (Black) (**Fig. B**)—Similar to ve, except mounted on standard banana plug. Each 50c

29-104R (Red), **No. 29-104B** (Black) (**Fig. C**)—Similar to 29-100, except with two molded phenolic shoulder hers to insulate post from panel. Net Each 50c

SERIES 29-1 SCREW TYPE BANTAMS (FIG. D)

minimum mounting space. Red and black molded parts are nolic to MIL-M-14. Nickel-plated brass metal parts. Mounts ⅜″ hole. Non-turn "D" washers; flush cross hole; integral ter stud.

29-1R (Red), **No. 29-1B** (Black). Net Each 40c

SERIES 29-3 STANDARD (FIG. E)

ilar to Series 29-1, but larger. Mount in ½″ hole.

29-3—Specify color: Red or Black. Net Each 40c

29-3—Specify color: Brown, Gray, Green, Blue, White Yellow. Net Each 45c

SERIES 29-33 SPRING-LOADED (FIG. E)

e Series 29-3, but spring-loaded head provides 24-oz. contact e on lug or lead.

29-33—Specify color: Red or Black. Net Each 40c

DUAL MOUNTED BINDING POSTS (FIG. F)

e for mounting two posts. For ⅜″ dia. No. 29-1R or 29-1B ts only. Molded phenolic to MIL-M-14.

29B11-1 (Black) or **No. 29B11-2** (Red). Net Each 10c

SERIES 29-41 SCREW-TYPE BINDING PLUG (FIG. G)

nforms to same standards as the binding posts; mounted on ndard banana plug.

29-41—Black. Net Each 50c

IES 29-43 SPRING-LOADED BINDING PLUG (FIG. G)

ad gives 24 oz. contact force. Designed for rapid connections.

29-43—Black. Each 50c

SERIES 29-42 TWIN BINDING PLUG (FIG. H)

ew type utilizes two binding plugs mounted on a molded nolic base. Banana plugs are on standard ¾″ centers. Fully embled unit.

29-42—Black. Net Each $1.25

SERIES 29-44 TWIN SPRING-LOADED PLUG (FIG. H)

ne as No. 29-42, but with spring loaded heads.

29-44—Black. Net Each $1.25

SERIES 2 MINIATURE TEST CLIPS

w, miniature version of 2-0 test clip designed to allow rapid nections without manual opening and closing of jaws. Used testing resistors, transistors, capacitors and other pigtail type nponents; also for single lead connections. Nickel plated brass h nickel plated steel 6-32 NC-1 threaded stud. Extends ¾″ ve mounting panel.

2-20 (**Fig. I**)—Net Each 25c

MINIATURE TEST CLIPS (CONTINUED)

No. 2-21 (**Fig. J**)—Similar to above, except mounted on a standard banana plug. Net Each 40c

No. 2-24 (**Fig. K**)—Similar to No. 2-20, except supplied with two molded phenolic shoulder washers to insulate clip from panel. Net Each 40c

SERIES 16 ALLIGATOR TEST CLIPS (FIG. L)

Fully insulated to permit two or more to be laid side by side without shorting. Molded phenolic parts meet MIL-M-14. Silver overlay contacts with 0.0015 ohm resistance.

No. 16-B—Black. Net Each 85c

No. 16-R—Red. Net Each 85c

SWITCH WASHERS (NOT ILLUS.)

Non-Turn Washer—For Series 5000, 12 and 24 tap switches. Key in mounting hole slides into bushing keyway; right angle tab locks into a predrilled hole on the back of the mounting panel. Cadmium plated brass.

No. 12C1087—Net Each 3c

Internal Tooth Lockwasher—For Series 5000, 12 and 24 tap switches. Approximately ½″ O.D.; made from .002″ cadmium-plated steel.

No. 12Q1272—Net Each 3c

TEST JACKS AND SLEEVES

SERIES 31 TEST JACKS (FIG. M)

For use on printed circuits as test points to feed AF, RF and Pulse signals, check and feed DC voltages, monitor signals during test, alignment, etc. For standard 0.081″ to 0.0825″ phone tip plugs. Rivets to board like an eyelet. Rivet dia., 0.114″. Jack is ¼″ high.

No. 31-1—For 1/16″ board. Net Each 25c

No. 31-2—For 3/32″ board. Net Each 25c

No. 31-3—For ⅛″ board. Net Each 25c

SERIES 31B PLASTIC SLEEVES (FIG. N)

Snap-on plastic insulators lock in place over Series 31 Test Jacks. Eight colors for coding. Once snapped over retainer ring, sleeves lock and cannot be removed. 0.245″ dia. x 0.290″ high.

No. 31B-1 (Black), **No. 31B-2** (Red), **No. 31B-3** (Green), **No. 31B-4** (Gray), **No. 31B-5** (Brown), **No. 31B-6** (Blue), **No. 31B-7** (Yellow), or **No. 31B-8** (White). Net Each 5c

INSULATING WASHERS (FIG. O)

Molded from black electrical grade or mica-filled phenolics. Available in eight sizes.

Screw Size	O.D.	Mica Filled		Black Electrical Grade	
		No.	Net	No.	Net
#6	.500″	21B1001-1	5c	21B1001-2	5c
#8	.500″	21B1002-1	5c	21B1002-2	5c
#10	.500″	21B1003-1	5c	21B1003-2	5c
¼″	.500″	21B1004-1	5c	21B1004-2	5c
5/16″	.500″	21B1005-1	5c	21B1005-2	5c
⅜″	.625″	21B1006-1	6c	21B1006-2	6c
#6	.375″	21B1021-1	5c	21B1021-2	5c
#4	.375″	21B1022-1	5c	21B1022-2	5c

MATING INSULATED WASHERS (FIG. P)

For jacks with a ⅜″ dia. bushing. Washer for rear of panel has indexing hole that corresponds with the non-turn tab of the jack. Front washer fits under hex mounting nut.

No. 21B78-1 (Mica filled phenolic) or **21B78-2** (Black electric grade). Net Per Pair 12c

COIL FORMS (FIG. Q)

Molded of mica-filled phenolic per MIL-M-14, Type MFE. Feature low loss at high frequencies, high dielectric strength; will not support fungus growth. Specify **No. 28YY1003** for type with posts; **No. 28YY1006** for type without posts. Net Each 20c

Part No. Suffix	Lgth., In.	O.D., In.	Lead Dia., In.	Part No. Suffix	Lgth., In.	O.D., In.	Lead Dia., In.
-1	.500	.125	.025	**-5**	.750	.250	.040
-2	.625	.187	.032	**-6**	1.000	.250	.040
-3	.750	.187	.032	**-7**	.500	.156	.032
-4	.500	.250	.040	**-10**	.375	.107	.025

STAND-OFF INSULATORS (FIG. R)

Body is molded of mica-filled phenolic per MIL-M-14, Type MFE. Terminals are silver-plated brass. Overall length, excluding mounting stud, 15/16″; diameter, 5/16″.

No. 18-1—Female. Net Each 35c

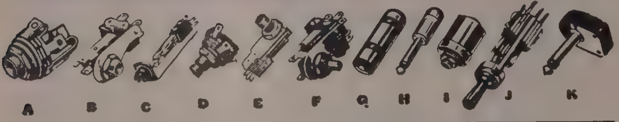
No. 18-2—Male. Net Each 40c

DIODE HOLDER

Made of molded black phenolic; MIL-M-14, type CFG. Spring tension snap-tite grip. Loop terminals of phosphor bronze wire, gold plated for soldering. Takes diodes up to .635″ long (center to center of clips on holder). Overall Size: 15/16″ l. x ⅜″ w. x ⅜″ h.

Grayhill No. 17-1—Net Each 35c

SWITCHCRAFT INC. Components



PHONE JAX

"Littel-Jax" (**Fig. A**)—Notched washers hold springs and lugs; "V" bend in tip spring holds mating plug; minimum space requirements. ⅜″ hole, panels to 5/32″.

"SF-JAX" (**Fig. B**)—Short frame type, requires minimum panel depth. Series 20 mount in ⅜″ hole, panels to 3/16″ thick. Series 50 mount in ⅜″ hole, panels to ¼″ thick, solder-lugs.

"LF-JAX" (**Fig. C**)—Long frame type. 3″ deep, ⅜″ hole in panels up to ¼″ thick.

"LITTEL-JAX"		"SF-JAX"		"LF-JAX"		Schematic
No.	Net	No.	Net	No.	Net	
11	24c	21	$0.39			
C-11	36c	51	.39			
L-11	30c	C-51	.72			
S-11	27c			31	$0.45	A
		22	.48			
		52	.48	32	.57	B
12A	27c	22A	.48			
C-12A	45c	52A	.48			
L-12A	33c	C-52A	.78	32A	.57	C
12B	33c	22B	.48			
C-12B	42c	52B	.48			
S-12B	39c	C-52B	.78	32B	.57	D
13	54c	23	.57			
		C-23	.81			
		53	.57	33	.63	F
13A	51c	23A	.57			
		C-23A	.81			
		53A	.57			
		C-53A	.93	33A	.63	U
13B	45c	23B	.57			
S-13B	57c	53B	.57	33B	.63	G
		23C	.57			
		53C	.57	33C	.63	V
13E	54c	23E	.57			
		C-23E	.81			
		53E	.57	33E	.63	H
		24	.66			
		54	.66	34	.72	W
		24A	.66			
		54A	.66			
		C-54A	.96	34A	.72	I
		24B	.66			
		54B	.66			
		C-54B	.96	34B	.72	J
		25	.78			
		55	.78	35	.87	N
		C-55B	1.11			X
		26	.84			
		56	.84	36	1.02	P

Note: Prefix "C" indicates Military type MIL-J-641.

PUSH BUTTON & ROTARY SWITCHES

"Littel-Switch" (**Fig. D**)—Non-locking only. Red button listed, for **Black**, change Nos. to 201, 202 or 203. Low amp.

"Tiny-Switch"—Similar in construction but about ⅓ the size of "Littel-Switch". Integral contacts only. Mounts ¼″ dia. hole in panels up to ⅛″ thick.

"FF-S" (**Fig. E**)—Series 1000. Non-locking, black push-button only. 3 amp, 120 v. AC, silver contacts. **"NF-Switch"** (**Fig. E**)—Series 4000. Smaller version of "FF"; same rating. **"RS Rotary Switch"** (**Fig. F**)—Locking (add "L" to no.) or non-locking; 2 or 3 position. Same contacts as above. Mount in ⅜″ dia. hole in panels up to ¼″ thick; only 1″ deep behind panel.

"LITTEL-SWITCH"		"FF" AND "NF" SWITCHES		Schematic
No.	Net	No.	Net	
101	54c	1001	$0.63	1
101S†	63c	4001	.63	
102	54c	1002	.63	2
102S†	63c	4002	.63	
103	60c	1003	.72	3
103S†	72c	4003	.72	
		1004	.78	4
		4004	.78	
		1005	.78	5
		4005	.78	
		1006	.93	6
		4006	.93	
		1009	1.26	7
		4009	1.26	

†Fine silver contacts instead of nickel silver. Rated 3 amps, 300 watts AC, non-inductive load.

"TINY SWITCHES"

Red Button	Black Button	Net Each	Schematic
951	961	54c	1
952	962	54c	2
953	963	60c	3

"RS-SWITCHES"—3-POSITION TYPES

No.*	†	Net	No.*	†	Net	No.*	†	Net
2034	17	90c	2035	18	90c	2036	19	$1.17

"RS-SWITCHES"—2-POSITION TYPES

2001	8	75c	2003	10	90c	2005	13	$0.90
2002	9	75c	2004	12	90c	2006	14	1.17

*Add **L** to Type Number for locking types. †Schematic diagrams.

"EXTENSION JAX" (FIG. G)

Clamp-type terminal provides cable anchor. Spring tempered nickel silver springs. Terminals mechanically interlock. Bakelite or nickel plated brass handles.

No.	Handle	Description and Type Terminal	Net Each
80	Black	2-cond., screw	$0.69
88	Black	2-cond., lug	.60
120	Shielded	2-cond., screw	.93
128	Shielded	2-cond., lug	.84
830	Black	3-cond., screw	.93
838	Black	3-cond., lug	.84
1230	Shielded	3-cond., screw	1.17
1238	Shielded	3-cond., lug	1.08
S-128#	Shielded	2-cond., lug	.90
126*	Shielded	2-cond., lug	1.08

#Special: .210″ sleeve I.D. to mate with S-250 plug. *Special: Used with short sleeve R-280 plug.

"LUG PLUG" (FIG. H)

Similar to the "Littel-Plug" Series 200 except two small solder lugs. 1″ long handle.

No.	Handle	Description	Net
350	Black	2-conductor	33c
355	Red	2-conductor	33c
380	Metal	2-conductor	42c
385	Metal	2-conductor	60c

"SHIELDED JAX" (FIG. I)

No.	Circuit, See Littel-Jax No.	Net
CN-11	11	48c
CN-12A	12A	51c
CN-12B	12B	57c
CN-13B	13B	69c

"LEV-R-SWITCHES" (FIG. J)

Series 3000—Unusually small, with 11/64″ thick bushing; overall length, 3 17/64″. Mounts in 15/32″ dia. hole in panels up to 5/64″ thick. **Series 13000**—⅜″ bushing; overall length, 3 15/32″. Mounts in 15/32″ dia. hole in panels up to ¼″ thick. Both have fine silver contacts rated 3 amps 120 v. AC; black plastic knobs.

Two Position Type

No.*	Net	No.*	Net	Schem.
3001	$1.17	13001	$1.26	8
3002	1.17	13002	1.26	9
3003	1.35	13003	1.44	10
3003D	1.44	13003D	1.50	11
3004	1.50	13004	1.59	12
3005	1.50	13005	1.59	13
3006	1.65	13006	1.65	14
3006D	1.74	13006D	1.74	15
3009	2.04	13009	2.25	20

Three Position Type

3033	$1.50	13033	$1.59	16
3034	1.56	13034	1.65	17
3035	1.56	13035	1.65	18
3036	1.74	13036	1.86	19
3036D	1.86	13036D	1.95	21
3037	1.77	13037	1.86	22
30312	2.25	130312	2.40	23†
30313	2.25	130313	2.40	23‡

Inter-Com. Type

3033T	$1.50	13033T	$1.59	16‡
3037T	1.77	13037T	1.86	22‡

*Add **L** for Locking types. †Normally closed. ‡Normally open.

Series 12000—Requires ⅞″ depth behind panel. Single hole mounting. Springs insulated. Fine silver contacts rated 3 amp 120 v. AC, non-inductive load, 300 w. max. standard.

Two Position Type

Series 12000		Net Each	Schematic
Locking	Non-Locking		
12001L	12001	$1.05	8
12002L	12002	1.05	9
12003L	12003	1.20	10
12003DL	12003D	1.35	11
12004L	12004	1.35	12
12005L	12005	1.35	13
12006L	12006	1.50	14
12006DL	12006D	1.65	15

Three Position Type

12033L	12033	$1.35	16
12034L	12034	1.41	17
12035L	12035	1.41	18
12036L	12036	1.59	19
12036DL	12036D	1.71	21
12037L	12037	1.65	22

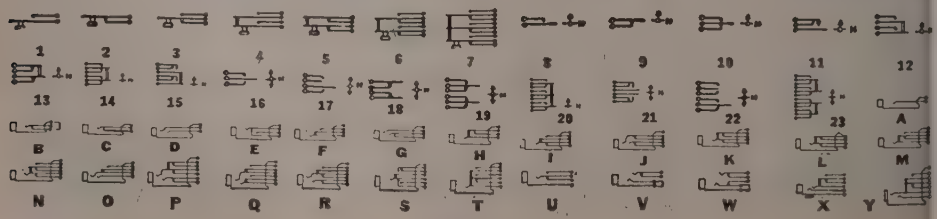
Three Position Locking One Side—Non-Locking Other Side

12033T	....	$1.35	16
12037T	....	1.65	22

"FLAT PLUG" (FIG. K)

Removable plastic cap; terminals and body mechanically interlocked. One piece tip rod.

No.	Handle	Description	Net
220	Black	2-cond., screw term.	54c
225	Red	2-cond., screw term.	54c
227	Black	2-cond., lug terminal	51c
229	Red	2-cond., lug terminal	51c
230	Black	3-cond., screw term.	78c
235	Red	3-cond., screw term.	78c
237	Black	3-cond., lug terminal	75c
239	Red	3-cond., lug terminal	75c



SWITCHCRAFT INC. Components

"PHONE PLUGS" (FIG. A)

ventional design standard plugs with lite or metal handles. O.D. 11/16".

Two-Conductor

Handle*	Description	Net
2 1/16": Black	Screw Terminal	$0.45
2 1/16": Red	Screw Terminal	.45
2 1/16": Metal	Screw Terminal	.72
1": Metal	Screw Terminal	.54
2 1/16": Metal#	Screw Terminal	.99
2 1/16": Metal	For use in 3-cond. jack	.63
1 3/4": Metal#	Screw Terminal	1.17

gth and material. #2-piece handle with -in cable clamp (1/4" cable). †MIL PJ-636.

Three-Conductor

Handle*	Description	Net
2 1/16": Black	Solder Lug	$0.63
1": Metal	Solder Lug	.78
2 1/16": Metal	Solder Lug	.90
2 1/16": Metal#	Solder Lug	1.17

gth and material. #2-piece handle with -in cable clamp (1/4" cable).

"LITTEL-PLUGS" (FIG. B)

ne plugs with handle and body of mini- diameter, yet fit standard jacks. various terminal combinations: A) l purpose sleeve terminal clamped over l braid of shielded cables; B) Sleeve inal can be clamped over outer insula- of 2-conductor cable (extra lug in inal for wire connection); C) Screw inal type has no cable clamp (one w in each terminal). Tenite or metal les 1 5/8" long x 1/2" dia. Exterior metal el-plated.

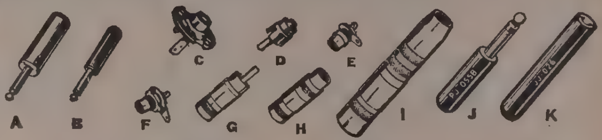
Two-Conductor

Handle	Description	Net
Black	Screw Terminal	45c
Red	Screw Terminal	45c
Black	Clamp-lug Terminal	42c
Red	Clamp-lug Terminal	42c
Metal	Screw Terminal	63c
Metal	Clamp-lug Terminal	60c
Metal	For use in 3-cond. jack	63c
Black	Clamp-lug Term., .206" dia sleeve	45c
Metal	Clamp-lug Term., .206" dia sleeve	60c
Metal	Clamp-lug Terminal*	75c

Three-Conductor

Handle	Description	Net
Black	Screw Terminal	72c
Black	Clamp-lug Terminal	63c
Red	Clamp-lug Terminal	63c
Metal	Screw Terminal	84c
Metal	Clamp-lug Terminal	78c

ilar to No. 280 but short sleeve for ere Recorders; mates with No. 126 ension Jax".



PHONO CONNECTORS

No.	Fig.	Description	Net
3501F	C	Phono Jack, 2 cond.	9c
3501M	D	Phono plug, 2 cond.	6c
3501MC	D	Phono plug, 2 cond. (cable clamp type)	9c
3501FP	E	Phono Jax, 7/16" O.D. for back panel mtg.	21c
3501FR	F	Phono Jax, 5/8" O.D. for front panel mtg.	24c
3502	G	Phono plug removable handle. Cable clamp. Shielded. N.P.	30c
3503	H	Phono ext. Jax. Removable hdle. Cable clamp. Sh'lded. N.P.	36c

SHIELDED "EXTENSION JAX" (FIG. I)

Same O.D. 1/2" as "Littel Plugs". For attachment to cable. Built-in cable clamp is cable support and sleeve terminal. Solder terminals.

No.	Description	Net
121	2-cond. for 1/4" dia. phone plugs	$0.96
131	3-cond. for 1/4" dia. phone plugs	1.20

"LOCK-PLUG"*

No.	Description	Net
282†	2-cond. Sim. No. 280	$0.84
298†	3-cond. Sim. No. 297	1.05

"LOCK-EXTENSION JAX"*

123†	2-cond. Mates with No. 282	$1.05
133†	3-cond. Mates with No. 298	1.35

*Locks connection after plug inserted.
†Clamp-lug term. Shielded.

SOLENOIDS "J" SERIES (NOT ILLUS.)

A simple solenoid assembly that can be added on the end of the standard frame assembly by two screws. 115 v. AC.

No. J-1—Used on interlock. Net. . **$5.10**
No. J-3—Used on all-lock. Net. . . **5.70**

"LAMP JAX"

Switchboard panel type. Lamp completely insulated. Interchangeable with WE #47A and 47B. Accepts standard switchboard lamps. Ideal for mounting on jack panel. Two frame mountings: Vertical, add prefix A; horizontal, prefix C.

Switchcraft No. LT-47—Net Ea. . . **$1.20**

"LITTEL-PLUG" AND "EXTENSION JAX"—MIL-TYPES

"Littel-Plug" (**Fig. J**) one-piece tip rod and one-piece sleeve and plug body, providing plug with complete continuity of thermoplastic insulation. Internally interlocked. "Extension Jax" (**Fig. K**) is cable jack with long brass body, spring tempered nickel silver springs, insulated by phenolic spacers and tubing. Cord strain relief easily applied to plugs and jacks by using U-shaped metal clamp (No. P-1074-1).

No.	Description	Net
410#	2-cond., solder cup. PJ-291 (old SC PL-291)	$0.36
430*	2-cond., screw term., blk. PJ-054B (old SC PL-54)	.84
435*	2-cond., screw term., red. PJ-054R (old SC PL-354)	.84
440	2-cond., screw term., blk. PJ-055B (old SC PL-55)	.84
445	2-cond., screw term., red. PJ-055R	.84
450*	2-cond., screw term., blk. PJ-540B (old SC PL-540)	.84
455*	2-cond., screw term., red. PJ-540R	.84
470	2-cond., screw term., shld. PJ-055M (old SC PL-125)	1.20
480	3-cond., screw term., blk. PJ-068 (old PL-68)	2.16
810	2-cond., solder lug. JJ-048 (old SC JK-48)	.48
820	2-cond., screw term., blk. JJ-026 (old SC JK-26)	1.20

#Mates with 810 ("Throat Mike Plugs & Jacks"). After wiring, shells must be cemmented and clamped until dry. *Mates with No. 820 jack.

No. P-1074-1—Strain Relief Clamp. Nickel plated brass. Package of 25, Net. . . . **51c**

STEEL JACK COVERS (NOT ILLUS.)

Series 500 for 3/8"-32 threaded jacks. Series 600 for tip jacks.

Description	No.	Net	No.	Net
Olive Drab	510	63c	610	45c
Bright Nickel	512	63c	612	45c
Black	515	63c	615	45c
Navy Gray	520	63c	620	45c

"TINI-JAX" MINIATURE PHONE JACKS

niniature phone jacks with notched insulating washers that llock mechanically with the springs and solder lugs, preventing ts. Mount in 1/4" hole in 1/8" thick panels.

el 41 (Fig. A)—2-conductor, open circuit. Net Each. . . **24c**
el 42A (Fig. B)—2-conductor, closed circuit. Net Each. . **27c**
el 43A (Not Illus.)—2-conductor, transfer circuit. Net. . **42c**

"TINI-PLUGS"

use with "Tini-Jax" on up to 3/16" O.D. cable. Terminals and mechanically interlocked. One-piece tip rod staked into mat- terminal; no disassembly of tip during use. Black or Red te Handles (**Fig. C**) or Nickel-plated Brass, shielded (**Fig. D**).

el 740—Black Tenite Handle, Screw Terminals. Net Ea. **45c**
el 745—Red Tenite Handle, Screw Terminals. Net Each **45c**
el 750—Black Tenite Handle, Clamp Lugs. Net Each. . **42c**
el 755—Red Tenite Handle, Clamp Lugs. Net Each. . . . **42c**
el 770—Shielded Handle, Screw Terminals. Net Each. . **63c**
el 780—Shielded Handle, Clamp Lugs. Net Each. **60c**

"TINI-EXTENSION-JAX"

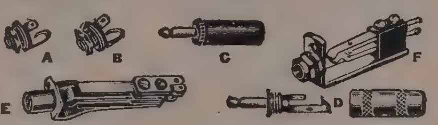
el 125 (Not Illus.)—2-conductor, shielded handle, r lug terminals. Net Each. **75c**

"M-JAX"—NAVY JACKS (FIG. F)

vy frame, 2 11/16" d., 3/8" hole in panels up to 1/4" thick.

itchcraft Circuit	MIL No.	Net Each	Switchcraft No. Circuit	MIL No.	Net Each
41 (A)	......	$0.90	M-444B (J)	JJ-082	$1.32
42A (C)	JJ-107	1.02	M-445 (N)	JJ-104	1.65
43A (U)	JJ-105	1.17	M-446 (P)	JJ-079	2.10
43B (G)	JJ-106	1.26	M-446A (Y)	JJ-081	2.34
44* (J)	JJ-083	1.38			

hing .2085", to mate with plugs PJ-068 and PJ-309.



"T-JAX" AND "MT-JAX"

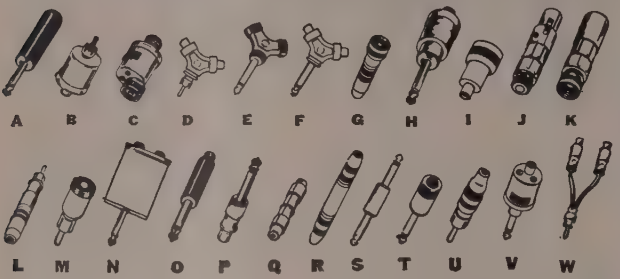
Long frame, switchboard jacks. **"MT-JAX"** (Fig. E) for high quality communication and military equipment, featuring welded crossbar Palladium contacts. Frame hole on top also available, add prefix "C" to part number. All types listed mate with 1/4" dia. plug sleeves except MT-342B and MT-344B, for .2085" dia. PJ-068 and PJ-309. **"T-JAX"**, commercial quality, for low cost communication equipment where economy is all important.

No.	Circuit	Net Each	No.	Circuit	Net Each
T-331	(A)	63c	T-334A	(I)	90c
T-332A	(C)	72c	T-334B	(J)	96c
T-332B	(D)	72c	T-334C	(K)	90c

Switchcraft No.	Circuit	MIL No.	Net Each	Switchcraft No.	Circuit	MIL No.	Net Each
MT-331	(A)	JJ-086	$0.90	MT-334E	(L)	JJ-085	$1.20
MT-332	(B)	......	1.02	MT-334F	(M)	JJ-035	1.20
MT-332A	(C)	JJ-024	1.02	MT-335	(N)	......	1.35
MT-332B	(D)	JJ-022	1.02	MT-336	(O)	JJ-074	1.35
MT-332C	(E)	JJ-016	1.17	MT-336A	(P)	JJ-075	1.65
MT-333	(F)	JJ-084	1.17	MT-336B	(Q)	JJ-077	1.65
MT-333B	(G)	......	1.17	MT-336C	(R)	JJ-073	1.65
MT-333E	(H)	......	1.17	MT-336E	(S)	......	1.65
MT-334A	(I)	......	1.20	MT-337	(T)	JJ-087	1.65
MT-334B	(J)	JJ-042	1.20	MT-342B	(D)	......	1.17
MT-334C	(K)	JJ-072	1.20	MT-344B	(J)	......	1.35

SWITCHCRAFT INC. Components

ADAPTERS AND CONNECTORS



Switchcraft No. 49 (Fig. A)—Has 2" black phenolic handle. Same as No. 341. Net **90c**
Switchcraft No. 169—Same as No. 49 but 1" shielded handle. Net Each.....**$1.05**
Switchcraft No. 328 (Fig. B)—Adapter connects ceramic phono cartridge to audio amplifier designed for magnetic cartridge. Phono jack input; phono plug output. Net Each......................**$2.37**
Switchcraft No. 329 (Fig. C)—Adapter for high-Z circuits to reduce or increase relative volume. Mike connector input and output. Net Each..............**$4.17**
Switchcraft No. 330F (Fig. D)—"Y" adapter. Two phono jack connectors in parallel to a standard phono plug. Net Ea. **$1.05**
Swirchcraft No. 330M (Fig. E)—"Y" adapter. Two male mike connectors in parallel to standard two-conductor phone plug. Shielded. Net Each.........**$1.14**
Switchcraft No. 330PJ (Fig. F)—"Y" adapter. Two phono jack connectors in parallel to a standard phone plug. Net Each.........................**$1.14**
Switchcraft No. 331 (Not Illus.)—Adapter Kit Plastic case containing one each 332, 334, 336, 338, 342, 344, 346, 348 and two 44. Net Each...................**$8.82**
Switchcraft No. 332—Similar to Fig. B, but phone jack input to female mike connector output. Net Each.........**$1.05**
Switchcraft No. 332A (Fig. G)—Two-conductor phone jack input to female mike output. Body ½" O.D. Nickel-plated; shielded. Net Each...............**$1.05**
Switchcraft No. 333 (Fig. H)—Standard ¼" 2-conductor jack input to special plug for American Geloso recorder jack. Net Each.........................**$1.41**
Switchcraft No. 334—Similar to Fig. B; phono jack input to female mike output. Net Each.........................**87c**

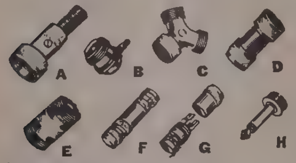
Switchcraft No. 334A (Fig. I)—Phono jack input to female mike connector output. O.D., ½". Nickel-pl.; shielded. Net. . **75c**
Switchcraft No. 334B—Same as Fig. I; less ring. Phono jack input to male mike connector output. Net Each........**75c**
Switchcraft No. 335 (Fig. J)—Input is No. 2501MP (Amphenol 75PC1M) connector; output is Cannon XL-3-11. Complete with internal wire unsoldered at one end for user's convenience. Net Each.....**$1.77**
Switchcraft No. 336—Similar to Fig. B; phone jack input, phono plug output. Net Each.........................**87c**
Switchcraft No. 336A (Fig. L)—Two-conductor phone jack input to phono plug output. Body ½" O.D. Nickel-plated; shielded. Net Each................**87c**
Switchcraft No. 338—Similar to Fig. B; male mike connector input to phono plug output. Net Each.................**87c**
Switchcraft No. 338A (Fig. M)—Phono plug one end, male mike connector at other. Net Each...................**60c**
Switchcraft No. 338B—Similar to Fig. M; but phono plug one end, female mike connector at other. Body ½" O.D. Nickel-plated; shielded. Net Each..............**60c**
Switchcraft No. 339 (Fig. K)—Same as No. 335 but No. 2501F (Amphenol 75-MC1F) output connector to Cannon XL-3-12 input connector. Net Each...**$1.77**
Switchcraft No. 340 (Fig. N)—Two 2-conductor jack inputs in parallel to a 2-conductor plug. Net Each..........**$2.25**
Switchcraft No. 341—Similar to Fig. H. Two-conductor jack input to 2-conductor plug output with circuit closing device when plug is removed. Patented; ideal for electrical musical instruments. Net Each.........................**$1.77**

Switchcraft No. 342—Similar to Fig. B dual-purpose binding post or banana jac input to phone plug output. Net. .**$1.56**
Switchcraft No. 343 (Fig. O)—Phon adapter has "Littel Plug" No. 250 wit female phono jack in handle. Internal re sistor adapts crystal phono pickups to ta recorder input. Resistor may be nullifi by twisting its leads together. Net.**$1.17**
Switchcraft No. 344—Similar to Fig. phono jack input to phone plug outpu Net Each............................**87**
Switchcraft No. 345A (Fig. P)—Phon plug output with phono jack input. Full shielded molded housing. Net Each. .**75c**
Switchcraft No. 346—Similar to Fig. tip jack input to phone plug output. Net Each.......................**$1.29**
Switchcraft No. 348—Similar to Fig. phono jack input to phono jack outpu Net Each............................**84**
Switchcraft No. 349A (Fig. Q)—Phon plug coupler has phono jacks at each end Gray plastic; fully shielded. Net Ea. .**60c**
Switchcraft No. 361 (Fig. R)—Phone plu coupler. Two-conductor phone jack in ea end. Shielded. Nickel-plated. Net.**$1.35**
Switchcraft No. 362 (Fig. R)—Phone plu coupler. Three-conductor phone jacks i each end. Net Each..............**$1.65**
Switchcraft No. 363 (Fig. S)—Coupler Two-conductor phone plug at each end Shielded. Net Each..............**$1.20**
Switchcraft No. 364 (Fig. T)—Two-con ductor Tini-Jax input to standard size (¼ O.D. sleeve) phone plug output. Body O.D. Shielded. Net Each............**87c**
Switchcraft No. 365 (Fig. U)—Two-con ductor Tini-Jax input to a phono plug output. Body 13/16" O.D. Nickel-plated; shiel ed. Net Each............................**87c**
Switchcraft No. 368 (Fig. V)—Input vol ume control adapter. Phono jack input t two-conductor phone plug output. Built-i volume control circuit. High volume sig nals, phonos, tuners, etc., can be connecte into high gain input jack of tape recorde without overloading recorder. Nickel plated; shielded. Net Each.......**$2.70**

FLEXIBLE "Y" CONNECTORS (FIG. W)

Phono jack and plug types. For convertin stereo player to monophonic. Can be use for tap-in meter monitor connector. Re quired on some tape recorders. Gray, shielded cable.
Switchcraft No. 330F1—Phono plug con nected to two phono jacks. Net Ea. **$1.20**
Switchcraft No. 330F2—Phono plug con nected to one phono jack and one phon plug. Net Each.........................**$1.20**
Switchcraft No. 330F3—Phono plug con nected to two phono plugs. Net. .**$1.20**

MICROPHONE CONNECTORS



Standard size mike connectors designed for use with single conductor cable. Panel receptacle mounts in .385" hole.

No.	Description	Net
2501F	Female, 1-contact, coupling ring. **(Fig. A)**	$0.36
2501M	Male, 1-contact. (Not Illus.)	.27
2501MP	Male panel conn. **(Fig. B)**.	.21
2501MPC	Closed circuit male panel connector (Not Illus.)	.27
44	Plug adapter **(Fig. H)**	.30
25Y	2 male to 1 female **(Fig. C)**	.99
2501FT	Dbl. female connects 2 cables to male **(Fig. D)**	.48
2501MT	Dbl. male connects 2 cables to female. **(Fig. E)**	.42
2501FL	Female 2-screw term. straight conn.; cable clamp built-in; 2-piece handle. **(Fig. F)**	1.35
2501FS	As above without cable clamp **(Fig. G)**	.99

"MINI-CON" CONNECTORS

Miniature mike connectors. Approx. half the size of Standard Series 2501. Takes cable up to 3/16" dia.; panel receptacle. No. 5501MP, mounts in 3/16" dia. hole, in panels up to ¼" thick; 5501MF mounts in ⅜" dia. hole with locknut on front of panel.

No.	Description	Net
5501F	Female, 1-contact, coupling ring	36c
5501M	Male, 1-contact	27c
5501MF	Male, panel conn., mounts front side panel	27c
5501MP	Male, panel conn., mounts back side	21c

JACK PANELS

Black phenolic strip, reinforced with steel, supports Switchcraft "T-JAX" and "MT-JAX". Slotted mounting brackets for standard 19" relay racks.

No.	Description	Net
1200	Single row, less jacks	$10.80
1232A	Single row, 12 pr. closed ckt. T-332A "T-Jax"	27.00
1332A	Single row, 12 pr. closed ckt. MT-332A "MT-Jax"	33.00
2400	Double row, less jacks. 2⅛" w. (holds 48 jacks)	12.00
2432A	Double row, 24 pr. closed ckt. T-332A "T-Jax". 2⅛" w.	45.00
2532A	Double row, 24 pr. closed ckt. MT-332A "MT-Jax" 2⅛" w.	57.00
2600	Double row, less jacks. 1¾" w. (holds 52 jacks)	15.00
2632A	Double row with 52 No. T-332A "T-Jax". 1¾" w.	51.00
2732A	Double row with 52 No. MT-332A "MT-Jax". 1¾" w.	66.00

"LITTEL PLUGS"—"TWIN PLUGS"

"Littel Plugs"—One-piece tip rod and one piece sleeve and plug body, assembled together into a mold as inserts. Insulated Internal interlock to prevent parts shifting in position. **"Twin-Plugs"**—Two electri cally independent two-conductor plugs, centers, placed into handles to provide double or "Twin-Plug". Self-aligning Made in same exacting manner as "Litte Plugs" above. Design and material NME spec. MIL-P-642(A).

"LITTEL PLUGS"—MILITARY TYPE

No.	Description	Net
420*	2-cond. black handle. Type PJ-047B (sim. WE 347B)	$0.9
425*	2-cond. red handle. Type PJ-047R (sim. WE 347A)	.9
482*	3-cond. red handle. Type PJ-051 (sim. WE 310)	2.

*Screw terminals.

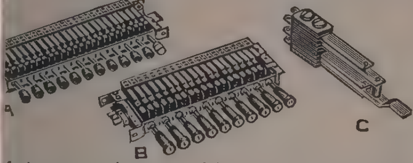
"TWIN PLUGS"—MILITARY TYPE

411	Black handle. Type PJ-327. Provision for internal cord clamp (not included)	$2.8
412	Black handle. (Old MIL PJ-289) Similar to WE-289B. External cord anchor	2.7
S-2674†	Strain relief clamp, brass, for 411	.9

†For package of 10.

pecial Switches, Fused Plugs

SWITCHCRAFT "MULTI-SWITCH" PUSH BUTTON SWITCHES



facturers, experimenters and labs can order their switch bly with the function desired. However, the unique design s it simple to change the function by very simple changes in sition of the stop plate and spring and in the plunger. The ing functions are possible: **1**—Interlock; **2**—Non-locking; l lock; **4**—Interlock and non-lock combinations; **5**—All lock on-lock combinations. When ordering "Multi-Switch" speci ich of the above functions is desired, keeping in mind the fact ny further function change can be accomplished very easily. i-Switches" are available with from one to 37 stations. t on ¼" panel. Overall depth 3⁹⁄₃₂". Center-to-center distance en buttons, ⅝". Standard plunger 1⅛" long, can be supplied 5¾" long. Long switch springs with no forms at point of provide long spring life. **Stack switches** mounted on a separate (must be ordered separately); up to four stacks can be ed by each button, providing innumerable circuit possi s. A brown push-on button is furnished for each station and ra red colored button furnished for use when switch requires se. Where button identification is desired a similar button is ble with a recess to insert an identification disc at extra cost; No. 561 (red), 562 (black), or 566 (brown). Mounting cen timated as follows: 1" plus ⅝" times the number of stations. **7000 (Fig. A)** described above. **Series 17000 (Fig. B)** include ove features plus illuminated buttons, accomplished with ure 6 volt lamps (screw base) located immediately under the able button. Lamp draws 75 mils. Push-on button has recess t to insert identifying discs and clear covers, or colored discs. y requirements. No special wiring to separate panel lights. ng circuit isolated from switching stacks, easily connected to als of completely insulated spring stacks at rear of switch. buttons light in the "IN" position; for "OUT" position, series number with "M"; for both "IN" and "OUT", prefix "N". Stacks for illumination circuit heavily mounted.

"SWITCH STACKS" (FIG. C)

Series 70—Fine silver contacts, rated 3 amps or 300 watts maximum non-inductive load. Contacts of released station will return to normal before contacts of newly operated circuit are actuated. **Series 700**—Identical to 70 except newly actuated station is actuated before contacts of released station return to normal. **Series 70P and 700P**—Identical to 70 and 700 except have Welded Cross Bar Palladium contacts for low level circuits; rated up to 3 amps, 300 watts maximum non-inductive load. **Series 70W**—Mechanically similar to Series 70 except designed for use in 120 volt AC power circuits; fine silver contacts rated up to 5 amps non-inductive load. Limited to one stack per button on each side of frame. **In ordering**, if more than one circuit will be required to balance load on plunger, specify two (or more) stacks. Locate stacks to balance load on plunger for easier action. Two screws, pressure plate furnished.

PRICES, BASIC FRAMES ONLY

Do not include stacks, which must be ordered separately. Series 7000 and 17000 frames are also available with 13 to 37 stations. **Write for prices.**

Series 7000*				Series 17000**			
No.	Net	No.	Net	No.	Net	No.	Net
[redacted]	$ 4.50	7700	$10.80	17100	$ 6.90	17700	$24.00
7200	5.10	7800	12.00	17200	8.70	17800	27.00
7300	5.85	7900	13.20	17300	11.70	17900	30.00
7400	7.20	71000	14.40	17400	14.70	171000	33.00
7500	8.40	71100	15.60	17500	17.70	171100	36.00
7600	9.60	71200	16.80	17600	20.70	171200	39.00

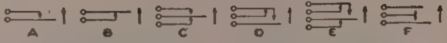
*7100, one station, and so on to 71200, which has 12 stations.
**17100, one station, and so on to 171200, which has 12 stations.

PRICES, "SWITCH STACKS"

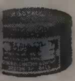
Circuit	Series 70		Series 70P		Series 70W		Series 700		Series 700P	
	No.	Net	No.	Net	No.	Net	No.	Net	No.	Net
1 "A"	71	30c	71P	36c	71W	48c	701	30c	701P	36c
1 "B"	72	30c	72P	36c	72W	48c	702	30c	702P	36c
1 "C"	73	36c	73P	48c	73W	69c	703	36c	703P	48c
1 "D"	73D	42c	73PD	54c	73D W	84c	703D	42c	703PD	54c
2 "A"	74	48c	74P	57c	......	.....	704	48c	704P	57c
2 "B"	75	48c	75P	57c	......	.....	705	48c	705P	57c
2 "C"	76	57c	76P	69c	76W	96c	706	57c	706P	69c
2 "D"	76D	69c	76PD	84c	76D W	†	706D	69c	706PD	84c

†$1.20.

BASIC CONTACT FORMS



NERAL CONTROL FOOT SWITCHES


MC

MI

MA

TYPE MC-13 FOOT SWITCH

ially adapted for unusual applications and hard use. Operat ily by foot, knee, hand or elbow. Double throw spring return . Patented "press-anywhere" non-slip tread top may be ed at any point of its surface with less than ¹⁄₁₆" throw and bs. pressure. BX connector mounted in side, access to als through removable top plate. Mounting holes are pro inside base. The MC's circular cast iron housing is finished attractive baked, gray wrinkle finish. 4" diameter, 2⅛" high.

TYPE MI-23 FOOT SWITCH

eal treadle-type foot switch, especially convenient for many ations. Double throw spring return action. Inclined, non-slip has an adjustable throw and includes a heel support. Has dard operating pressure of 4 lbs. Supplied with a BK con in base, terminals through removable base plate. Mounting rovided on each side. Cast iron, attractive gray wrinkle 6¾" long, 3" high, 4" wide.

TYPE MA-3 FOOT SWITCH

tweight switch with an actuating treadle built into top to t operation with unusually light foot pressure. A long-life "du.op" limit switch forms the internal switch section. mmended for fast operation where minimum fatigue is tant. Treadle throw approximately ⅜". Cable enters switch gh front by means of a BX connector or a rubber grommet, cified. Removing front end of casting gives access to internal terminals. May be mounted by means of holes in the hous ed treadle, gray wrinkle finish. 4½" long, 1¾" high, 4" wide.

el	Ratings, Non-Inductive	Net Each	Model No.	Ratings, Non-Inductive	Net Each
	10 a., 115 v. AC 5 a., 230 v. AC	$ 4.60	MI-23	10 a., 115 v. AC 5 a., 230 v. AC	$ 9.80
3	20 a., 125 v. AC 15 a., 250 v. AC 3 a., 460 v. AC	6.50	MI-25	6 a., 250 v. AC 12 a., 125 v. AC	11.25
			MI-26	20 a., 125 v. AC 15 a., 250 v. AC 3 a., 460 v. AC	13.65
3	20 a., 125 v. AC* 20 a., 250 v. AC* 20 a., 460 v. AC*	12.30	MI-27	15 a., 125 v. AC 7½ a., 230 v. AC	15.00

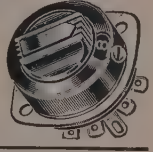
y duty ratings.

FEDERAL ANTI-CAPACITY SWITCHES

High quality Anti-Capacity Switches of the quick-make-quick-break type. Positive action. All models listed below are normally open. Smooth operating lever action is of the cam-roller type with graphite impregnated bearing turning on tool steel axles. Provides smooth action, easy operation under all atmospheric conditions, humid or dry, hot or cold. Round and flat master spring blades are of silver plated phosphor bronze with pure silver contacts. Molded bakelite insulating block with chrome faceplate. Aluminum frame. 2½" x 5" x ¾" overall. Average Shipping Weight, 5 oz.

Federal No.	Poles	Net Each
1425	DPDT	$2.53
1426	DPST	2.53
1427	DPST	2.53
1424	4PDT	2.84
12494	8PDT	6.20

AMPHENOL TAP SWITCHES



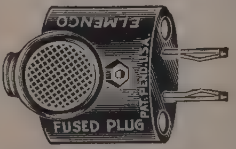
Eight-position single pole continuous switch with white markings clearly visible in window cap. Side set screw locks switch arm in position, preventing accidental tap changes.

Amphenol No. 36—Numbers 1-8 with internal solder lugs. Net Each. **56c**

Amphenol No. 36-1—Numbers 1-8. Net Each **67c**

Amphenol No. 36-2—Impedance markings 0-2-4-8-16-250-500. Net Each **67c**

ELMENCO FUSED PLUG



Spring action design of the male blade assures 100% positive contact regardless of worn condition of wall outlet. Impact resistance cover offers complete protection against current surges and short circuits. Finger grips make it easier to handle. Contains two small fuses which provide perfect protection against damage to appliance and to main line. Blown fuses easy to replace without opening plug. Fit any standard wall outlet. Uses 3AG and 3AB fuses up to 20 amps. Supplied without fuses. U/L Approved. Net Each **45c**

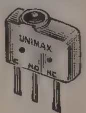
Snap Switches, Jacks, Plugs

UNIMAX® PRECISION SNAP-ACTING SWITCHES

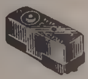
USM

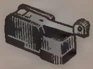
2HBJ-1

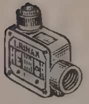
1SB1-1


EA1

USMW


2HB-1


2HBA-1


KEB2HB-5

2HBL-1

1SJ1-1

2HBF-1

SUBMINIATURE SNAP-ACTING SWITCHES

Compact, fully enclosed SPDT units for reliable, high speed current control. Commercial, MIL and high temperature units available. Stack easily; solder terminals. Rated 3 amps 30 v. DC inductive; 5 amps 30 v. DC resistive; 5 amps 125/250 v. AC.

Unimax Type	Actuator; and Max. Operating Force, Oz.	Overall Size, Inches	List 1-9*
USM	Pin; 7 oz.	25/32 x 1/4 x 17/32	**$1.40**
USML	Leaf; 6 oz.	25/32 x 1/4 x 17/32	**1.55**
USMW	Nylon roller; 6 oz.	25/32 x 1/4 x 17/32	**1.90**
USM5†	Pin; 5 oz. (MIL)	25/32 x 1/4 x 17/32	**1.45**
USM5L†	Leaf; 6 oz. (MIL)	25/32 x 1/4 x 17/32	**1.60**
USM5W†	Nylon roller; 6 oz. (MIL)	25/32 x 1/4 x 17/32	**1.95**
1SJ1-1‡	Panel mtg. plunger; 12 oz.	25/32 x 3/8 x 1 1/8	**4.55**
1SJ1-2‡	Same as above, no keying tab	25/32 x 3/8 x 1 1/8	**4.55**
1SB1-1	SPDT toggle	25/32 x 3/8 x 1 5/16	**3.75**
1SB1-2	Same as above, no keying tab	25/32 x 3/8 x 1 5/16	**3.75**
EA1	Sealed USM5; 5-17 oz. 12" lead	7/8 x 11/32 x 11/16	**6.10**
EA1-Y	Same as above, NO	7/8 x 11/32 x 11/16	**6.00**
EA1-W	Same as above, NC	7/8 x 11/32 x 11/16	**6.00**

*Discount: 10% on 10-19; 20% on 20-49; 30% on 50-99; 35% on 100-199. †MIL-S-6743 and MS-25085-1. ‡2-position, single-pole maintained.

STANDARD SNAP-ACTING SWITCHES

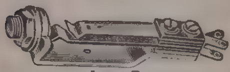
SPDT switches available with solder lug (suffix **-1**) or screw type (suffix **-5**) terminals. Units vary only in type of actuator. U/L listed for 20 amps at 125, 250, 480 v. AC; 0.25 amp 250 v. DC; 0.50 amp 125 v. AC (MXO-1-W, MXU-1, MB-1, MBT-1—15 amps only). For SPST normally open operation, specify by adding suffix **Y** to type number; for SPST normally closed, add suffix **W** to number (write for prices); for SPDT, use number as listed.

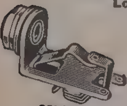
Unimax Type	Actuator; Max. Operating Force, Oz.; and Term. Type	Overall Size, Inches	List 1-9*
2HB-1	Pin; 9-13; lug term.	1 15/16 x 11/16 x 13/16	**$1.50**
2HB-5	Same as above, screw term.	1 15/16 x 11/16 x 15/16	**1.65**
2HBA-1	Hinged roller leaf; 1-3 1/2; lug	1 15/16 x 11/16 x 1 3/64	**2.40**
2HBA-5	Same as above, screw term.	1 15/16 x 11/16 x 1 5/32	**2.50**
2HBF-1	Prestressed hinged; 10; lug	1 15/16 x 11/16 x 1 3/64	**2.40**
2HBF-5	Same as above, screw term.	1 15/16 x 11/16 x 1 5/32	**2.50**
2HBD-1	Stub-plunger; 9-13; lug term.	1 15/16 x 11/16 x 13/16	**1.85**
2HBD-5	Same as above, screw term.	1 15/16 x 11/16 x 59/64	**1.95**
2HBJ-1	Panel mtg. plunger; 9-13; lug	1 15/16 x 11/16 x 13/16	**3.45**
2HBJ-5	Same as above, screw term.	1 15/16 x 11/16 x 59/64	**3.55**
2HBL-1	Leaf spring; 5; lug term.	1 15/16 x 11/16 x 13/16	**1.65**
2HBL-5	Same as above, screw term.	1 15/16 x 11/16 x 59/64	**1.75**
2HBM-1	†	1 15/16 x 11/16 x 13/16	**2.75**
2HBM-5	Same as above, screw term.	1 15/16 x 11/16 x 59/64	**2.85**
2HBT-1	Hinged leaf; 1-2 1/2; lug	1 15/16 x 11/16 x 1 3/64	**1.90**
2HBT-5	Same as above, screw term.	1 15/16 x 11/16 x 1 5/32	**2.00**
2HBW-1	Roller leaf spring; 5; lug	1 15/16 x 11/16 x 13/16	**2.15**
2HBW-5	Same as above, screw term.	1 15/16 x 11/16 x 59/64	**2.25**
2HBY-1	Prestressed hinged; 10; lug	1 15/16 x 11/16 x 1 3/64	**1.90**
2HBY-5	Same as above, screw term.	1 15/16 x 11/16 x 1 5/32	**2.00**
KEB2HB-5	Stub-plunger; 9-24; screw; metal-cased 2HB-5	3 x 1 x 2 3/4	**6.05**
KER2HB-5	Roller; 9-13; screw term.; metal-cased 2HB-5	3 x 1 x 1 55/64	**8.10**
MB-1	Pin; 2-3 1/4; lug term.	1 15/16 x 11/16 x 13/16	**1.50**
MBT-1	Hinged leaf; 15; lug term.	1 15/16 x 11/16 x 53/64	**1.90**
MXU-1	Bottom reset; 4-8; lug	1 15/16 x 11/16 x 13/16	**1.65**
MXO-1-W	Top reset; 4-8; lug (SPST)	1 15/16 x 11/16 x 13/16	**2.40**

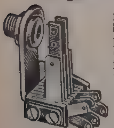
*Discount: 10% on 10-19; 20% on 20-49; 30% on 50-99; 35% on 100-199. †Door safety switch with "cheater" to hold circuit closed for servicing. Closing the door releases the cheater and puts circuit back on safety.

All switches listed above available in high sensitivity type. Write for prices.

MALLORY JACKS AND PLUGS


Long Frame

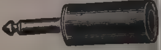

Midget


Junior

Long frame jacks are mounted horizontally to frame. Junior jack is made with frame and spring stack at right angles, with short springs, requiring only 1 5/16" behind panel. Both above models mount in a single hole in up to 1/4" thick panel. Midget jack is very compact and infant jack is smallest made, but is for 2-way phone plug only. Midget and infant jacks mount in 7/16" hole in panel up to 1/4" thick. All jacks made with cadmium-plated frames, bushings and special alloy springs are nickel-plated, silver contacts. Complete with mounting nuts and washers.

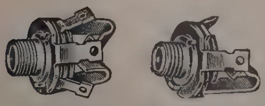
Long Fr.		Junior		Infant and Midget		
Mal. No.	Net Ea.	Mal. No.	Net Ea.	Mal. No.	Net Ea.	Schem.
1	45c	701	45c	A-1	39c	
2	57c	702	51c	A-2	48c	
2A	57c	702A	57c	A-2A	57c	
2B	57c	702B	57c			
3	60c	703	60c			
		703A	60c	A-3A	66c	
3B	60c	703B	60c			
		703C	60c			
		704	69c			
		704A	69c			
4B	75c	704B	69c			
5	90c	705	75c			
6	1.05					

PHONE PLUGS



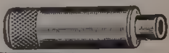
Mal. No.	Circuit	Shell	Net Each
55	....	Adapts mike con. to stand. jack	**$0.30**
75	2-way	Phenolic tie-cord anchor, shielded	**.45**
75A	2-way	Nickel, 2-piece, tie-cord anchor, built-in cble. clp.	**1.05**
75N	2-way	Nickel, tie-cord anchor, shielded	**.66**
76	3-way	Phenolic	**.66**
76A	3-way	Nickel, 2-piece, built-in cble. clp.	**1.17**
85	2-way	Miniature phone plug, shielded	**.36**

SC JACKS



Mallory No. SC-1A Phone Jack—Equivalent of Military No. JJ-034. Same spring arrangement as No. 1 long frame jack. Designed to receive following plugs: Mallory No. 75; Western Electric Nos. 47A and 47B; Signal Corps Nos. PL-47, PL-48, PL-55, PL-148, PL-155, PL-125; JAN plugs PJ-055, PJ-155, PJ-634, PJ-636 and PJ-047. Net Each..... **36c**

EXTENSION JACKS



Mallory No.	Circuit	Shell	Net Each
100	2-way	Fiber	**$0.84**
100N	2-way	1-piece nickel	**1.08**
100A	2-way	2-piece nickel, built-in clamp	**1.50**

Mallory No. SCA-2B—Microphone Jack. Equivalent of Military Jack No. JJ-033. Same spring arrangements as No. 2B long frame jack. Designed to receive the following plugs: Western Electric No. 109 and Signal Corps Nos. PL-68 and PL-168. JAN Plugs PJ-068, PJ-168, and PJ-309. Net Each **42c**

XP JACKS

For telephone switchboard and industrial applications requiring a compact jack for close strip panel mounting. Special frame angle provides greater support. Plain, unthreaded bushing; jack mounts by use of screw through panel mounting plate at bushing base. Bushing fits all standard two and three conductor Mallory plugs. Springs assembled horizontally to frame. Bushings and springs nickel-plated; cadmium-plated steel frame; fine silver contacts.

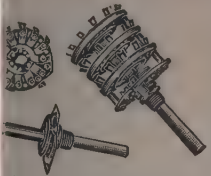
Mallory No. XP1—Open circuit type. Net Each........................ **63c**

Mallory No. XP2B—Three circuit microphone type. Net Each....... **75c**

Mallory No. XP3B—Single circuit, make before break type. Net Each.. **90c**

entralab Miniature Switches, Parts

1000 SERIES MINIATURE PHENOLIC SWITCHES



Laminated phenolic insulated rotary switches that meet requirements for a miniature switch for rigorous commercial or military uses. Clip and contact arrangements assure low inter-circuit capacitance and contact resistance. Index assemblies and hardware identical to PA-2000 series, permitting interchangeability. **Insulation:** High quality laminated phenolic type PBE per MIL-P-3115B specs.; voltage .down 1000 v. AC-RMS. **Size:** ½" spacing between sections; pacing between 1st section and front plate, phenolic section hick. **Hardware:** All metal parts (except clips and contacts) ium plated; withstand 25-hour salt-spray test. **Mounting:** e hole with locating lug. Bushing ⅜"-32 thread ⅜" long. ¼" diam. full round, 2¼" long. **Rating:** 2 amps at 15 v. DC; nilliamps at 110 v. AC. **Index:** Positive, adjustable stop or nuous rotation; 30° or 60° detents available.
ıting nut, lockwasher and 1¼" black pointer knob are ied with switches.

MINIATURE PHENOLIC SWITCHES

RL Number		Poles to Section	No. of Sections	No. Poles	Total Pos.	Net Each
ting	Non-Shtg.					
000	PA-1001	1	1	1	2-11	$1.50
002	PA-1003	2	1	2	2-5	1.50
004	PA-1005	1	2	2	2-11	2.16
006	PA-1007	3	1	3	2-3	1.50
008	PA-1009	1	3	3	2-11	2.70
010	PA-1011	4	1	4	2	1.50
012	PA-1013	2	2	4	2-5	2.16
014	PA-1015	1	4	4	2-11	3.18
016	PA-1017	1	5	5	2-11	3.72
018	PA-1019	3	2	6	2-3	2.16
020	PA-1021	2	3	6	2-5	2.70
022	PA-1023	1	6	6	2-11	4.20
024	PA-1025	4	2	8	2	2.16
026	PA-1027	2	4	8	2-5	3.18
028	PA-1029	4	3	12	2	2.70
030	PA-1031	2	5	10	2-5	3.72
032	PA-1033	2	6	12	2-5	4.20

SPECIAL CIRCUIT AND 60° INDEXING SWITCHES

034*	....	1	1	1	2-10	$1.50
040†	....	1	1	1	2-10	1.50
....	PA-1035‡	1	1	1	2-6	1.50
....	PA-1037‡	1	2	2	2-6	2.16

shorted to common contact in CCW, progressively opened dropped with CW rotation. †All open in full CCW, progres- picked up and shorted to common with CW rotation. ndexing; 1½" spacing between sections.

SEPARATE PHENOLIC SECTIONS

with index assemblies PA-300, PA-301 and PA-302 for all pt Model PA-45, which uses PA-304 or PA-305, 60° index) ssembly of special switches to meet your needs.

CRL Number		Indexing	No. Poles	Total Positions	Net Each
orting	Non-Short.				
-30	PA-31	30°	1	2-11	72c
-32	PA-33	30°	2	2-5	72c
-34	PA-35	30°	3	2-3	72c
-36	PA-37	30°	4	2	72c
-38*	PA-39*	30°	1	2-5	72c
-40**	PA-41**	30°	1	2-11	72c
-43†	....	30°	1	2-10	72c
-49††	....	30°	1	2-10	72c
....	PA-45	60°	1	2-6	72c

sed contacts one side of common connected and shorted out. unused contacts connected and shorted out. †Active contacts ed to common in full CCW, progressively opened and dropped CW rotation. ††All active contacts open in full CCW, proively picked up and shorted to common with CW rotation.

SEPARATE INDEX ASSEMBLIES

t assemblies for series PA-1000 and PA-2000 interchangeable.

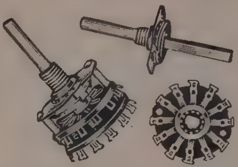
No. PA-300 Assembly—Contains PA-300 (30°) index, P-120 er knob, adjustable stop plate, two ⅛" spacers, two 9⁄32" rs, four 7⁄16" spacers, 2½" tie bolts, nuts, lockwashers and spacer washers. Rear shaft length 2". Use with 1 to 3 ons. Net Each $1.14

No. PA-301 Assembly—Contains PA-301 index (30°), P-120 er knob, adjustable stop plate, two ⅛" spacers, two 9⁄32" rs, ten 7⁄16" spacers, four 15⁄16" spacers, 5" tie bolts and hard-. Rear shaft length 4". Use with 4 to 6 sections. Each $1.50

No. PA-302 Assembly—Contains PA-302 (30°) index, P-120 er knob, adjustable stop plate, four 3⁄16" spacers, two 9⁄32" rs, sixteen 7⁄16" spacers, eight 15⁄16" spacers, 7" tie bolts, and ware. Rear Shaft length 6". Use with 7 to 9 sections. Each $1.98

No. PA-304 Assembly—Contains PA-304 (60°) index and ware same as PA-300. Rear Shaft length 2". Use with 3 sections. Net Each $1.20

No. PA-305 Assembly—Contains PA-305 (60°) index and ware same as PA-301. Rear shaft length 4". Use with 3 sections. Net Each........ $1.56



PA-2000 SERIES MINIATURE CERAMIC SWITCHES

Complete line of ceramic insulated miniature rotary switches with the following features: 1-piece shaft construction; adjustable stop allows selection of positions or continuous rotation; cadmium plated metal parts, except clips and contacts; available as complete switches or separate assemblies. Excellent RF characteristics. Shaft 1⅞" from bushing, index available 30 and 60 degree with adjustable stop; mounting is single hole and optional locating lug, bushing ⅜-32 thread, ⅜" long. Includes mounting nut, lockwasher and 1¼" black bar knob. Index assemblies and hardware are identical and interchangeable with those of the PA-1000 series. Rating: 2 amps. at 15 v. DC; 150 milliamps. at 110 v. AC.

SERIES PA-2000 MINIATURE ROTARY SWITCHES

CRL Number		Poles to Section	No. of Sections	No. Poles	Total Pos.	Net Each
Shorting	Non-Shtg.					
PA-2000	PA-2001	1	1	1	2-12	$1.98
PA-2002	PA-2003	2	1	2	2-6	1.98
PA-2004	PA-2005	1	2	2	2-12	2.82
PA-2006	PA-2007	3	1	3	2-5	1.98
PA-2008	PA-2009	1	3	3	2-12	3.60
PA-2010	PA-2011	2	2	4	2-6	2.82
PA-2012	PA-2013	1	4	4	2-12	4.32
PA-2014	PA-2015	5	1	5	2-3	1.98
PA-2016	PA-2017	1	5	5	2-12	5.16
PA-2018	PA-2019	6	1	6	2	1.98
PA-2020	PA-2021	3	2	6	2-5	2.82
PA-2022	PA-2023	2	3	6	2-6	3.60
PA-2024	PA-2025	1	6	6	2-12	6.00
PA-2026	PA-2027	2	4	8	2-6	4.32
PA-2028	PA-2029	3	3	9	2-5	3.60
PA-2030	PA-2031	5	2	10	2-3	2.82
PA-2032	PA-2033	2	5	10	2-6	5.16
PA-2034	PA-2035	6	2	12	2	2.82
PA-2036	PA-2037	2	6	12	2-6	6.00
PA-2038	PA-2039	5	3	15	2-3	3.90
PA-2040	PA-2041	6	3	18	2	3.90

SPECIAL CIRCUIT AND 60° INDEXING SWITCHES

PA-2052*	....	1	1	1	2-10	$1.80
PA-2042†	....	1	1	1	2-10	1.80
PA-2048‡	PA-2049‡	1	2	2	2-12	3.90
PA-2050§	....	1	2	2	4	1.98
....	PA-2043††	1	1	1	2-6	1.80
....	PA-2045††	1	2	2	2-6	2.52

*All shorted to common in full CCW, progressively opened and dropped with CW rotation. †All open in full CCW, progressively picked up and shorted to common with CW rotation. ‡Silver clips and contacts. §For switching dual lines. ††60° Indexing; 1½" spacing between stations.

SERIES PA-2000 STEATITE SECTIONS

For use with 30° index assemblies No. PA-300, PA-301 and PA-302, except Nos. PA-17 and PA-20, for use with 60° index assemblies PA-304 and PA-305.

CRL Number		Number of Poles	Number of Positions	Net Each
Shorting	Non-Shorting			
PA-0	PA-1	1	2-12	$0.99
PA-2	PA-3	2	2-6	.99
PA-4	PA-5	3	2-5	.99
PA-6	PA-7	5	2-3	.99
PA-8	PA-9	6	2	.99
PA-10††	PA-19††	1	2-5	.99
PA-11*	PA-18*	1	2-11	.99
PA-12†	....	1	2-10	.99
PA-13‡	....	1	2-10	.99
PA-20	PA-17	1	2-6	.99

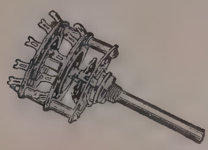
††Unused contacts one side of common connected and shorted out. *All unused contacts connected and shorted out. †9 contacts, open in full CCW position, progressively picked up and shorted to common with CW rotation. ‡9 contacts, shorted to common in full CCW position, progressively opened and dropped with CW rotation.

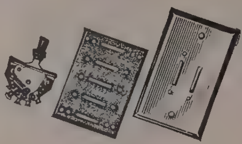
SILVER CLIPS AND CONTACTS

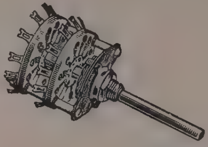
CRL Number		Index	No. of Poles	No. of Positions	Net Each
Shorting	Non-Shorting				
PA-16	PA-21	30°	1	2-12	$1.65
PA-14	PA-23	30°	2	2-5	
PA-15	PA-24	30°	4	2	

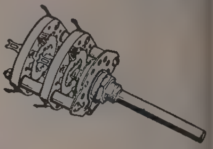
For switches to military specifications add "M" to part number (PA-2000M). State specifications which must be met. Where no specification number is stated, switches will meet finish requirements of MIL-S-3786. Prices and delivery on request.

Centralab Rotary and Lever Switches


1400 Series


Lever Action


2500 Series


2542-2554

1400 SERIES—LAMINATED PHENOLIC INSULATION

Extremely compact design. Mounting bushings ⅜"-32 thread, ⅜" long. Shafts 1⅞" from end of bushing. Positive 30° index with adjustable stop. Revisions or corrections easily made due to availability of all parts separately. Packaged with mounting nut, lockwasher, 1¼" black pointer knob. Index assemblies and hardware are identical and interchangeable with those of 2500 series. Rated: 2 amps @ 15 v. DC; 150 ma @ 110 v. AC.

CRL Number		Poles to Section	No. Sections	No. Poles	No. Positions	Net Each
Shorting	Non-Short.					
1400	1401	1	1	1	2-6	$1.74
1402	1403	1	1	1	2-11	1.74
1404	1405	2	1	2	2-5	1.74
1410	1411	1	2	2	2-6	2.16
1412	1413	1	2	2	2-11	2.16
1406	1407	3	1	3	2-3	1.74
1420	1421	1	3	3	2-6	2.70
1422	1423	1	3	3	2-11	2.70
1408	1409	4	1	4	2	1.74
1414	1415	2	2	4	2-5	2.16
1426	1427	1	4	4	2-6	3.18
1428	1429	1	4	4	2-11	3.18
1416	1417	3	2	6	2-3	2.16
1424	1425	2	3	6	2-5	2.70
1418	1419	4	2	8	2	2.16
1430	1431	2	4	8	2-5	3.18

SEPARATE PHENOLIC SECTIONS

Deluxe Types: .187" rotor slot, use P-270, P-271, P-272 indexes.

CRL Number		No. of Poles	No. of Positions	Net Each
Shorting Type	Non-Shorting Type			
AD	HD	1	2-6	72c
BD	JD	1	2-11	72c
CD	KD	2	2-5	72c
DD	LD	3	2-3	72c
ED	MD	4	2	72c
EED	BBD	4	2-3	99c
FD**	AAD**	1	2-5	72c
GD*	CCD*	1	2-10	72c
PID‡	....	1	2-10	72c
ND and PD	....	Resistance Decade†		72c
QD	....	Capacitance Decade		72c

*All unused contacts connected and shorted out. ‡9 contacts, open in full CCW, progressively picked up and shorted to common with CW rotation. †Combination of two sections; price includes both. **Unused contacts one side of common connected and shorted out.

SEPARATE INDEX ASSEMBLIES

Deluxe Type: 1-piece shaft .187" thick flat; use deluxe 1400 or 2500 Series sections. Units include index, pointer knob and hardware for complete assembly.

CRL No. Deluxe	No. of Sections	Rear Shaft	Net Each
P-270	1 to 3	2"	$1.14
P-271	3 to 5	4"	1.50
P-272	5 to 10	8"	1.98

LEVER ACTION SWITCHES

Coil spring and cam index design provide guaranteed minimum life 150,000 switching cycles. Smooth "clean" action. Coil type index spring. Furnished with black paddle-type knob. Rating: 2 amps. at 15 v. DC; 150 milliamps. at 110 v. AC.

CRL No.		No. Poles	Positions	Index	Net Each
Shorting	Non-Short.				
1452	1454	2	3	Positive	$1.05
1453	1455	2	3	Spring Return	1.05
1466	1467	2	3	Pos. and Spring Ret.	1.05
1456	1457	4	2	Spring Return	1.20
1459	1458	4	2	Positive	1.20
2815*	....	2	3	Positive	1.05
....	1475†	1	3	Positive	1.05

*Model railroad reversing switch. †Test equipment replacement.

Mounting Plates for Lever Switches—Type A made of .035" die cut steel, black crackle finish. Provides ¾" spacing between switches. Type B for use in electrical outlet boxes. Chrome plated steel with mounting holes 3 5/16" between centers. Type A 2⅝" h.

CRL Type A	No. Switches	Lgth. In.	Net Each	CRL Type B	No. Switches	Net Each
P-1755	1	¾	30c	P-221	2	51c
P-1756	2	1½	30c	P-222	1	51c
P-1757	3	2¼	30c	Size: 2¾" x 4½" overall.		
P-1758	4	3	30c	¾" spacing between switches.		
P-1759	5	3¾	30c			

ANTENNA SWITCH KIT

(Not Illustrated). Ceramic section rotary switch for UHF-VHF antenna switching. Rated at 2 amps. for 150 v. DC; 150 milliamps. at 110 v. AC. Contains: PA-2050 switch, P-218 bracket-dial plate, P-401 knob, two self-tapping wood screws.

CRL No. PK-400—Net Each .... $\$1^{65}$

2500 SERIES—STEATITE INSULATION

Made of highest quality (grade L-5A) Steatite insulation. Meet critical requirements of RF circuit applications. Bushing ⅜"-32 thread ⅜" long. Shaft 1⅞". Positive 30° index with adjustable stop. Index assemblies and hardware are identical and interchangeable with those of the 1400 Series. Ratings same as 1400 Series

CRL Number		Poles to Section	No. Sections	No. Poles	No. Positions	Net Each
Shorting	Non-Short.					
2500	2501	1	1	1	2 6	$1.98
2502	2503	1	1	1	2-11	1.98
2504	2505	2	1	2	2-5	1.98
2510	2511	1	2	2	2-6	2.82
2512	2513	1	2	2	2-11	2.82
2506	2507	3	1	3	2-3	1.98
2520	2521	1	3	3	2-6	3.60
2522	2523	1	3	3	2-11	3.60
2514	2515	2	2	4	2-5	2.82
2516	2517	3	2	6	2-3	2.82
2524	2525	2	3	6	2-5	3.60

SEPARATE CERAMIC SECTIONS

Deluxe Types: .187" rotor slot, use P-270, P-271, P-272 indexes.

CRL Number		No. of Poles	No. of Positions	Net Each
Shorting Type	Non-Shorting Type			
TD	XD	1	2-6	99c
UD	YD	1	2-11	99c
RD	RRD	2	2-5	99c
SD	SSD	3	2-3	99c
VD	ZD	4	2	99c
GGD*	FFD*	1	2-10	99c
PISD‡	....	1	....	99c
NSD and PSD	....	Resistance Decade†		99c
QSD	....	Capacitance Decade		99c

*All unused contacts connected and shorted out. ‡9 contacts, open in full CCW, progressively picked up and shorted to common with CW rotation. †Two sections combined; price includes both.

STEATITE HAM-TYPE SWITCHES

Heavy-duty deluxe ceramic construction for ham applications Available in 60° and 90° index. All metal parts except clips and contacts are cadmium plated steel; all units have phenolic shaft through switch sections. Positive index with adjustable stop; 60 units have 2-6 active positions; 90° units, 2-4. Single hole mounting: ⅜"-32 thread bushing ⅜" long. Shaft ¼" diam. 2¼" long, ful round. Rated 150 milliamps. at 150 v. AC; 4 milliamps. at 1500 v AC; 2 amps. at 15 v. DC; will handle 15 watts; for tubes operatin at voltages up to 1 kv. and inputs to 150 watts. Unit complet includes mounting nut, lockwasher, pointer knob, and dial plate

NON-SHORTING HAM SWITCHES

CRL No. 90°	CRL No. 60°	Poles to Section	No. Sections	No. Poles	Net Each
2542	2550	1	1	1	$1.80
2543	2551	1	2	2	2.55
2544	2552	1	3	3	3.30
2545	2553	1	4	4	4.05
2546	2554	1	5	5	4.80

SEPARATE SECTIONS

CRL No.	Index	No. Poles	Positions	Type	Net Each
XXD	90°	1	2-4	Non-shorting	99c
ZZD	60°	1	2-6	Non-shorting	99c

SEPARATE INDEX ASSEMBLIES

Deluxe 90° and 60° Types: 2-piece shaft with phenolic rear, meta front; for high voltage operation; use XXD section for 90°; us ZZD section for 60°.

CRL No. 90°	CRL No. 60°	Rear Shaft	Suggested No. Sections	Net Each
P-278	P-273	2"	1 to 2	$1.14
P-279	P-274	4¼"	3 to 4	1.44
P-280	P-275	7"	5 to 8	1.80

DUAL SPEAKER SWITCH KIT

(Not Illustrated). Primarily designed for rear seat auto radio speaker applications. It is adaptable, however, to many commercial applications. Contains: 1484 switch, P-216 bracket-dial plate, P-401 knob, two self-tapping metal screws and instructio sheet.

CRL No. PK-300—Net Each .... $\$1^{05}$

NEW ALL-PURPOSE INTERCOM SWITCHES

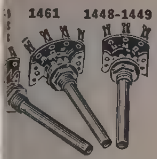
CRL Type 1448-1449—Six pole three position, will fit practicall every intercom application in use. Both units have replaceable co spring indexing assuring 50,000 cycles minimum.

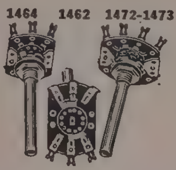
CRL No. 1448—Spring return both sides. Net Each.....$1.65

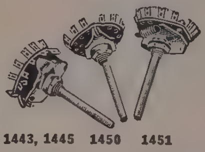
CRL No. 1449—Spring return one side; positive index opposi side. Net Each..............................$1.65

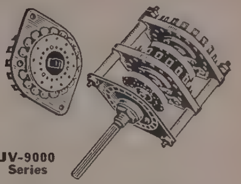
CRL No. PK-500—Lever action switch assembly for PA or intercom systems. Cord operated. Comes in kit form. Net Each.$1.62

entralab Special Switches, Kits









GENERAL PURPOSE AND TONE SWITCHES

No. 1460—SPDT. May be used as SPST or SPDT. Positive .c. Shorting contacts. Net Each **90c**

No. 1463—Same as above except has spring return index non-shorting contacts. Net Each **90c**

No. 1461 —SP. Three-position selector switch. Positive index. ting contacts. Net Each **90c**

No. 1462—DPDT. May also be used as SPDT, SPST, or T. Positive index. Shorting contacts. Net Each **90c**

No. 1464—Two pole, two position, spring return index non-shorting contacts. Net Each **90c**

No. 1465 –Single pole, 4-position (3 active), with DPST, AC switch, shorting contacts, positive index. Net Each . . **$1.50**

No. 1473 -Two pole, three position. Positive index. Shorting acts. Net Each **90c**

No. 1472—Same as above except with non-shorting contacts. Each **90c**

No. 1483—Specially designed to be used with auxiliary rear auto radio speakers. Permits the operation of either speaker ately or both simultaneously. Single pole, three position. ive index. Shorting contacts. Extra long shaft. Net Each **90c**

No. 1484 –Same as above except with ¼″ bushing and 7/16″ l split shaft; 15/16″ black pointer knob. Net Each **90c**

ROTARY ACTION FLAT SWITCHES

No. 1443—"23 CLIPPER" single pole, 23 positions, shorting contacts. 15° positive index. Requires 1″ behind panel. Silver d contacts. Fixed stop. Net Each **$1.80**

No. 1444—Same as 1443 except 2 sections, 2 poles. Each **$2.40**

No. 1445—Same as 1443 except continuous rotation; 23 posi- include one "off". Net Each **$1.80**

No. 1450—"ECONO-SWITCH." A 4 pole, 2 position econom- designed switch. Requires only ⅞″ depth behind panel. be used as SPST, SPDT, DPDT, 3PST, 4PST, or 4PDT. ive non-shorting leaf type index. Laminated phenolic insula- Net Each **$1.05**

No. 1451—"PERMA-SWITCH". Long life coil spring h similar in style to the type 1450 but with 4 pole 2 positions. Each **$1.20**

SECTIONS ONLY

No. WD—For replacement in 1443, 1444 and 1445 switches deluxe shaft and .187″ rotor slot (DD type). Net Each. **99c**

RIES JV-9000 HEAVY-DUTY POWER SWITCH

accuracy and long life to meet engineering requirements for mitters, industrial controls, laboratory equipment, etc. mic grade L-5A steatite insulation; 1″ spacing between sec- Metal parts are cadmium plated steel except clips, contacts ndex spring. **Index:** Positive 20° adjustable stop; continuous ess rotation through 18 positions. **Mounting:** ⅜″-32 thread ing ⅜″ long: shaft ¼″ diam. double flat 2¼″ long. **Rating:** mps at 115 v. AC; 25 amps at 6 v. DC; 0.75 amp at 500 v. AC; mp at 1000 v. AC. Solid coin silver contacts. Includes 2″ le set screw pointer knob, dial plate and instructions.

SERIES JV-9000 ROTARY SWITCHES

RL Number		Poles to Section	No. Sections	No. Poles	No. Positions	Net Each
ting	Non-Short.					
000	JV-9001	1	1	1	2–17	$ 9.60
002	JV-9003	3	1	3	2–5	9.60
004	JV-9005	1	2	2	2–17	15.90
006	JV-9007	3	2	6	2–5	15.90
008	JV-9009	1	3	3	2–17	22.20
010	JV-9011	3	3	9	2–5	22.20
012	JV-9013	1	4	4	2–17	28.50
014	JV-9015	3	4	12	2–5	28.50
016	JV-9017	1	5	5	2–17	34.80
018	JV-9019	3	5	15	2–5	34.80
020	JV-9021	1	6	6	2–17	41.10
032	JV-9033	2	1	2	2–8	9.60
034	JV-9035	2	2	4	2–8	15.90
036	JV-9037	2	3	6	2–8	22.20
038	JV-9039	2	4	8	2–8	28.50

SERIES JV-9000 SECTIONS

CRL Number		Number Poles	Number Positions	Net Each
horting	Non-Shorting			
V-8	JVN-8	1	2–17	$6.30
V-9	JVN-9	3	2–5	6.30
V-10	JVN-10	2	2–8	6.30
V-18*	JVN-18*	1	2–18	6.90

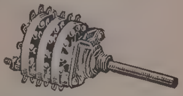
or has 17 fingers making contact with 17 contacts on stator, ng one contact open. By cutting off unwanted fingers this on can be adapted to special circuits, e.g., one off, nine pro- ively shorting positions.

ERIES JV-9000 DIAL PLATES, INDEX ASSEMBLY

Nos. P-230, P-231 or P-232—2¾″ diam., etched aluminum on background; 20°; marked 1-5 for P-230, 1-8 for P-232, 1-17 for P-231. Packaged 5 of a number. Net Pkg..... **90c**

No. JV-7 Index Assembly—Includes shaft, tie rods, spacers, and lockwashers, adjustable stop pin, 2″ black bar and dial plate. Net Each........................ **$4.20**

SUBMINIATURE ROTARY SWITCHES



Deluxe, ceramic insulated rotary switches that are ultra-small. Weigh less than 1 oz. each, yet have the same electrical ratings as switches much heavier and larger. Ideally suited for band switching, transistor circuits, aircraft instruments, etc. Insulation is Dow-Corning 200 Silicone treated L-5A steatite; resistance exceeds 10,000 megohms. **Size:** Ceramic sections ⅛″ thick spaced ⅛″ apart with ceramic spacing; spacing between front plate and first section, 5/32″. All hardware except clips, contacts, and index spring are of cadmium plated steel. **Mounting:** Single hole with optional locating lug on ⅜″ radius. Bushing ¼″-32 thread, ¼″ long. Shaft ⅛″ diam. x 1¼″ long. **Rating:** Make and break, resistance load 0.5 amps. at 6 volts DC; 100 milliamps. at 110 v. AC. **Index:** Positive 30°; fixed stop.

CRL Number		Total Poles	No. of Positions	Poles Per Sec.	No. of Sec.	Net Each
Shorting	Non-Short.					
PS-100	PS-101	1	11	1	1	$4.80
PS-102	PS-103	2	11	1	2	6.00
PS-104	PS-105	2	5	2	1	4.80
PS-106	PS-107	3	11	1	3	7.20
PS-108	PS-109	3	3	3	1	4.80
PS-110	PS-111	4	5	2	2	6.00
PS-112	PS-113	4	2	4	1	4.80
PS-114	PS-115	6	5	2	3	7.20
PS-116	PS-117	6	3	3	2	6.00
PS-118	PS-119	8	2	4	2	6.00
PS-120	PS-121	9	3	3	3	7.20
PS-122	PS-123	12	2	4	3	7.20

SEPARATE STEATITE SECTIONS

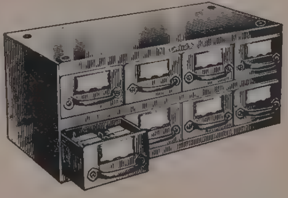
CRL Number		No. Poles	No. of Positions	Fixed Stop Indexing	Net Each
Shorting	Non-Short.				
PS-20	PS-21	1	2-11	Use	$2.70
PS-22	PS-23	2	2-5	P-501	2.70
PS-24	PS-25	3	2-3	thru	2.70
PS-26	PS-27	4	2	P-511	2.70

SEPARATE INDEX ASSEMBLIES

Designed for maximum of three sections. Includes: Index and shaft assembly; KC-6 knob; two 3/32″ spacers; two 1/16″ spacers; six ⅛″ spacers; two 3/16″ spacers; two 1⅛″ tie bolts; nuts, lockwashers, washers; and 16 plastic spacer washers.

CRL Number	No. of Positions	CRL Number	No. of Positions	Net Each
P-501	2	P-507	8	$2.70
P-502	3	P-508	9	2.70
P-503	4	P-509	10	2.70
P-504	5	P-510	11	2.70
P-505	6	P-511	Continuous Rotation	2.70
P-506	7			2.70

CABINET SWITCH KITS



Convenient source of stock sections, indexes and hardware packed in heavy gauge steel, shelf-size cabinets, 23¼″ x 9½″ h. x 12″ d.

CRL Kit No. PA-410—Contains 106 pieces 1½″ dia. phenolic sections, 32 index assemblies (including dial plates, knobs and hardware) of PA-1000 series switches. Assembles 32 regular or special switches. Net Each........................ **$134.19**

CRL Kit No. PA-420—Contains 102 pieces of 1½″ dia. steatite sections, 32 index assemblies (with knobs, dial plates, etc.), of PA-2000 series. Makes 32 switches. Net Each. **$158.85**

CRL Kit No. 414D—Series 1400 phenolic switch parts; 100 phenolic 1⅞″ dia. sections, 30 index assemblies to make 30 switches. Includes knobs, dials and hardware. Net. **$130.32**

CRL Kit No. 419D—Series 2500 ceramic parts; 100 sections and 29 index assemblies to make 29 switches; 30° and 60°. Net Each........................ **$154.62**

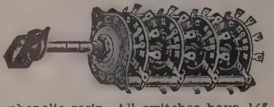
CRL Kit No. 1000—68 miniature phenolic sections, 15 complete index assemblies of PA-1000 switches in 4-drawer 9½″ x 11½″ x 9¾″ metal cabinet. Net Each........................ **$71.81**

CRL Kit No. 2000—39 miniature steatite sections, 12 index assemblies of PA-2000; 4-drawer cabinet as above Net Each........................ **$57.68**

Mallory Special Purpose Switches

MULTI-SECTION ROTARY SWITCHES

TYPES 1200L-1300L



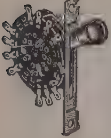
For test equipment, meter switching and low current industrial applications. All contacting members are silver plated. This assures low contact resistance. Phosphor-bronze springs insure long life and prevent failures. Insulated with high-grade phenolic resin. All switches have ½″ spacing between sections excepting the three and four section which have 1″. Supplied with ⅜″ dia., ⅜″ long brass bushing and 2″ long shaft grooved for cutting. 1¼″ mounting radius required. Bar knob, locknut and washer included. Average Shpg. Wt. 8 oz.

Short. Type Mallory No.	Non-Short. Type Mallory No.	No. of Circuits Per Section	No. of Circuits Per Switch	No. of Positions	No. of Sections or Gangs	Net Each
1211L	1311L	1	1	2 to 11	1	$1.74
1215L*	1315L*	2	2	2 to 5	1	1.74
1213L*	1313L*	3	3	2 to 3	1	1.74
1212L*	1312L*	4	4	2 to 2	1	1.74
1221L	1321L	1	2	2 to 11	2	2.16
1225L*	1325L*	2	4	2 to 5	2	2.16
1223L*	1323L*	3	6	2 to 3	2	2.16
1222L*	1322L*	4	8	2 to 2	2	2.16
1231L	1331L	1	3	2 to 11	3	2.70
1235L*	1335L*	2	6	2 to 5	3	2.70
1241L	1341L	1	4	2 to 11	4	3.18
1245L*	1345L*	2	8	2 to 5	4	3.18
1251L	1351L	1	5	2 to 11	5	3.42
1256L	1356L	2	10	2 to 6	5	3.78
1261L	1361L	1	6	2 to 11	6	4.02
1266L	1366L	2	12	2 to 6	6	4.59

*These switches are provided with an "off" position which is in addition to the number of positions listed in the fifth column.

LEVER ACTION SWITCHES

TYPES 5000 AND 6000

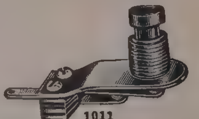


Particularly adapted to centralized radio, sound distribution, public address equipment and intercommunicating systems. Housing and bracket are one integral part, prevents warping or mis-alignment of contacts. Terminals secured by "wrap-around" method to high grade phenolic resin. 5000 series bracket have elongated holes spaced 2 3/16″ to 2⅜″ apart. 6000 series has round holes spaced 1⅝″ apart. Can be mounted in multiple with ¾″ between lever arm centers. Knob and two 6-32 bolts and nuts furnished. Shipping Weight 4 oz.

POSITIVE INDEXING

Shorting Type Mallory No.	Non-Short. Type Mallory No.	No. of Poles or Circuits	No. of Positions or Contacts	Net Each
5124	5224	2	4	$1.14
6142	6242	4	2	.99
6143	6243	4	3	.99

MINIATURE PUSH-BUTTON SWITCHES


1011

Especially suitable for use in such applications as test panels, meter circuits and labs. Eight different circuit combinations available in non-locking type only, where contact is made when button is depressed. Alloy contact springs, fine silver contacts, cadmium plated steel switch frame, aluminum mounting bushing. Mounts in single hole, 7/16″ diameter, on panels up to ¼″ thick. Mounting radius is 1 1/16″; depth, 7/16″ min. (1011) and ⅞″ max. (1018). Voltage breakdown, 500 v. DC. With mounting nut and washer.

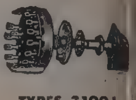
Mallory No.	Circuit Arrangement	Net Each
1011	SPST—Make	$0.57
1012	SPST—Break	.57
1013	SPDT	.66
1014	DPST—Make 2	.72
1015	DPST—Break 2	.72
1016	DPDT	.87
1017	DP—Make 2, Break 1	.87
1018	DPDT—Make before break	1.20

FIVE-POSITION HAMSWITCH ®

Provides a method of using a single meter to measure current or voltages up to five circuits of an amateur transmitter. Same basic design as Series 1200L: Two-section construction with 2¼″ spacing permits soldering of multiplying resistors to switch terminals. Requires 3¼″ mounting depth. Has conservative rating of 1000 volts RMS AC or 1500 volts DC. Indexing 60°. Has adjustable stop feature for maximum of five positions. Bushing is ⅜″ dia. x ⅜″ long, shaft is ¼″ dia x 2″ long, grooved for easy cutting. Knob, nut and lock washer furnished.

Mallory No. 151L Hamswitch—Net Each............. $\$2^{25}$

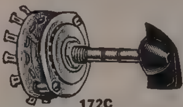
SINGLE SECTION ROTARY SWITCHES


TYPES 3100J
3200J

For use in small receivers as tone controls, band selector and antennae switching; also for meter switching in test equipment and other devices where space is a factor. Two sizes available: 1¼″ dia. 30° indexing and 1 11/16″ dia. 20° indexing. Insulated with high-grade phenolic resin. Supplied with ⅜″ dia., ⅜″ long brass bushing and 2″ long shaft grooved for cutting. Requires 7/16″ mounting hole. Bar knob, locknut and washer included. Average Shpg. Wt. 4 oz.

Short. Type Mallory No.	Non-Short. Type Mallory No.	No. of Circuits	No. of Positions	Diam. of Base	Adjustable Stop	Net Each
3115J	3215J	1	5	1¼″	No	$0.84
31112J	32112J	1	12	1¼″	No	.84
3122J	3222J	2	2	1¼″	No	.84
3123J	3223J	2	3	1¼″	No	.84
3126J	3226J	2	6	1¼″	No	.84
3134J	3234J	3	4	1¼″	No	.87
3142J	3242J	4	2	1¼″	No	.87
3143J	3243J	4	3	1¼″	No	.87
31117J	32117J	1	2 to 17	1 11/16″	Yes	1.29
3129J	3229J	2	2 to 9	1 11/16″	Yes	1.29
3136J	3236J	3	2 to 6	1 11/16″	Yes	1.38
3163J	3263J	6	2 to 3	1 11/16″	Yes	1.38

CERAMIC SECTION SELECTOR SWITCHES

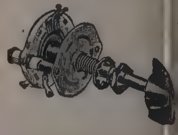

172C

Ideal for highly efficient, critical r-f circuit applications in radio receivers and low-power transmitter circuits. Ceramic insulation minimizes r-f losses and retards moisture absorption. Adjustable stop is feature of index assembly permitting choice of 2 to 11 positions. All current carrying parts are heavily silver plated. Two section switch has ½″ spacing between sections, three section 1″. Supplied with ⅜″ dia., ⅜″ long brass bushing and 2″ long shaft grooved for cutting. All types non-shorting. Bar knob, locknut and washer included. Average Shipping Weight 7 oz.

Mallory No.	Number of Gangs	Number of Circuits Per Gang	Number of Positions	Net Each
172C	1	1	2 to 11	$\$1^{98}$
173C*	1	2	2 to 5	
174C*	1	3	2 to 3	
176C	2	1	2 to 11	2^{82}
177C*	2	2	2 to 5	
178C*	2	3	2 to 3	
180C	3	1	2 to 11	3^{60}
181C*	3	2	2 to 5	

*Has additional "off" switch preceding numbered positions.

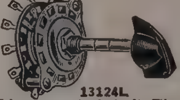
CERAMIC SECTION HAMBAND SWITCHES



A special ceramic switch designed for transmitter circuits up to 1000 V. D. C. with power up to 100 watts. Ceramic insulation is employed in both sections and spacers 90° indexing between positions, and capable of continuous rotation. Supplied with ⅜″ dia., ⅜″ long brass bushing and 2″ long shaft grooved for cutting. Bar knob, locknut and washer included. Shipping Weight 8 oz.

Mallory Number	No. of Sections	Circuits	Spacing Between Sections	Contacts Per Circuit	Net Each
161C	1	1	......	4	$1.80
162C	2	2	1⅛″	4	2.55
163C	3	3	1″	4	3.30
164C	4	4	1″	4	4.05
165C	5	5	1″	4	4.80

24-POSITION TAP SWITCH NO. 13124L


13124L

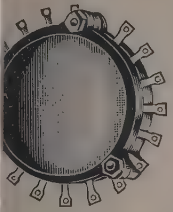
For test applications which cannot be met with conventional 12-point switch. Accomplished through use of two sections similar in design 1300L switches. Indexing mechanism has no stops, and is capable of continuous rotation with a 15° indexing action between positions. Furnished with ⅜″ dia. x ⅜″ long bushing and 2″ long, notched shaft. Electrical characteristics similar to 1200L 1300L series. Each switch is equipped with No. 366 knob, No. 2 nut, No. 227 lock washer and No. 394 dial plate.

Mallory No. 13124L Switch—Net Each................ $\$2^{3}$

nstrument Switches and Relays

J-B-T INSTRUMENT SWITCHES

MOLDED ROTARY SELECTOR SWITCHES



All moving parts enclosed. Contact lugs permanently integrated into switch assembly. Sturdy construction with 3-post deck suspension, double grip collector arms, and rectangular drive shaft through decks for precision indexing. Interchangeable, electrically and mechanically, with J-B-T 14 and 20-position laminated switches.

Construction features the same as Models SS-14 and SS-20.

BASIC 14-POSITION

13 circuits and "off" per deck in 2 3/32″ circle for compactness. Molded end cover regularly supplied. Knob included. Collector arm placed directly opposite to flat of t, so that knob pointer points to live contact. Common or ' lug is bent down for ready identification. **Internal Con- ction:** Double-grip collector arms hold contact lug on upper lower surfaces; collector ring is self-wiping. One to ten decks, 5/16″ per deck to depth. For eleven decks and over, add ½″ to h for double indexing mechanism; add 5/32″ to depth for ad- ıble stop mechanism. Continuous rotation type supplied ss adjustable stop (type MAS) is ordered. Panel locator able on quantity orders. On MS-14-4 and MS-14-6, extra nut and longer screw available for inverting supporting screw est common, thus converting into panel locator.

BASIC 20-POSITION

rcuits and "off" per deck in 2 5/8″ circle. One to seven decks 5/16″ per deck to depth. Otherwise same as 14-Position.

TYPE MS-14—ANGULAR INDEXING 25° 43′

J-B-T Type	Positions/ Circuit	Circuits/ Deck	† Decks	Depth Behind Panel	Net Each
14-1	14**	1	1	13/16″	$2.00
14-1S*	14***	1	1	13/16″	2.05
14-2	14**	1	2	1⅛″	2.55
14-2S*	14***	1	2	1⅛″	2.65
14-3	14**	1	3	1 7/16″	3.10
14-4	14**	1	4	1¾″	4.05
14-6	14**	1	6	2⅜″	5.90

TYPE MS-20—ANGULAR INDEXING 18°

20-1	20**	1	1	13/16″	$2.55
20-1-6DT	2**	6	1	13/16″	3.25
20-1S*	20***	1	1	13/16″	2.60
20-2	20**	1	2	1⅛″	3.25
20-2-6DT	2**	6	2	1⅛″	4.70
20-2S*	20***	1	2	1⅛″	3.35
20-3	20**	1	3	1 7/16″	4.30
20-4	20**	1	4	1¾″	5.35
20-6	20**	1	6	2⅜″	7.55

more than 6 decks, **Write for Prices.**
ndard items but not regularly stocked. Write for date of ery. **Non-shorting type. ***Shorting type.

TYPE MAS-14—ADJUSTABLE STOP SWITCHES ANGULAR INDEXING 25° 43′

ositions. Enclosed adjustable stop mechanism located on l side of switch increases switch length 5/32″ behind panel; eases effective bushing length by 3/32″; and shortens shaft ading from bushing by 1/16″.

-B-T Type	Positions/ Circuit	Circuits/ Deck	† Decks	Depth Behind Panel	Net Each
5-14-1	14**	1	1	31/32″	$2.60
5-14-1S*	14***	1	1	31/32″	2.70
5-14-2	14**	1	2	1 9/32″	3.20
5-14-2S*	14***	1	2	1 9/32″	3.30
5-14-3	14**	1	3	1 19/32″	3.85
5-14-4	14**	1	4	1 29/32″	4.80
5-14-6	14**	1	6	2 17/32″	6.75

ndard items but not regularly stocked. Write for date of ery. **Non-shorting type. ***Shorting type. †For more than cks, **write for prices.**

LAMINATED INSTRUMENT SWITCHES

d, 3-post deck suspension; all current carrying parts meet 100 salt spray test; ball bearing action, beryllium-copper spring SS-14; phosphor bronze on SS-20, and sharp detent assure ive indexing. Laminated plastic decks and rotors selected for imum mechanical and dielectric strength. **Compactness:** 14- ion switch takes 13 circuits and "off" in 2″ circle; 20-position ch handles 19 circuits and "off" in 2 23/32″ circle. Extra decks only 5/16″.

Contact Loss: Double-grip collector arms, and large-area acts, silver to silver, results in average contact resistance of ohm or less during the useful life of switch.

ple Dielectric: AC or DC; normal carrying capacity (not e-and-break), 1 amp.; maximum momentary capacity (not e-and-break), 5 amps.; maximum voltage between contacts ground 1500 volts rms; between decks and ground, 2000 s rms.

BASIC 20-POSITION

ontacts per deck, continuous rotation types. One to six decks; ach additional deck add 5/16″ to depth. Continuous rotation supplied unless otherwise specified.

BASIC 14-POSITION

Knob supplied on individually packed units. Collector arm placed directly opposite to flat of shaft unless otherwise specified. 13 contacts per deck. One to 6 decks; for each additional deck add 5/16″ to depth. Continuous rotation type supplied unless otherwise specified. Adjustable stop normally supplied on standard switches. Panel locator.

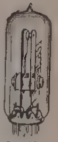
TYPE SS-14—ANGULAR INDEXING 25° 43′

J-B-T Type	Positions/ Circuit	Circuits/ Deck	Decks	Shorting, Non-Short.	Net Each
SS-14-1	14	1	1	N-S	$1.90
SS-14-1A*	5†	2	1	N-S	2.05
SS-14-1S*	14	1	1	S	1.95
SS-14-1CS#*	14	1	1	CS	2.35
SS-14-2	14	1	2	N-S	2.35
SS-14-2A*	5†	2	2	N-S	2.65
SS-14-2S*	14	1	2	S	2.45
SS-14-2CS#*	14	1	2	CS	3.25
SS-14-3	14	1	3	N-S	2.80
SS-14-3S*	14	1	3	S	2.95
SS-14-4	14	1	4	N-S	3.65
SS-14-6	14	1	6	N-S	5.30

*Standard items but not regularly stocked. #Complete shorting—all contacts shorted except one in use. †Five positions include 4 "live" and 1 "off". **Includes 5 "live" and 1 "off".

AMPERITE RELAYS

DELAY RELAYS



Glass Enclosed—Hermetically Sealed—AC-DC or Pulsating Current. Circuits: SPST only—normally open or normally closed. Heater Wattage: The wattage consumed is approx. 2 w. Heaters can be operated continuously. Contact Rating: 115 v., 3 amp AC (or 220 v. 1 amp AC); maximum voltage between contacts and heater -1500 v. or delays 10 sec. or more. Under 10 sec., 500 v. Ambient Temperatures: Relays are compensated for temperatures of −55° to +70° C. Life: With 115 v., 2 amp AC, noninductive, at least 250,000 operations Base Wiring: Heater—Prongs 2-3; Contacts –5-7. **Miniature types** (designated by suffix T, e.g., 6N05T) are made in all delays from 2 to 120 sec. and all voltages. The 6 v. miniature is made from 2 to 180 sec.

Net Each.. **$2.40**

NORMALLY OPEN CONTACTS*

Del. Sec.	Tol. Sec. 20° C.	HEATER VOLTAGES 2.5 V.	5.0 V.	6.3 V.	12 V.	26 V. (22-30)	115 V.
2	± 1	2N02	5N02	6N02	12N02	26N02	115N02
3	± 1	2N03	5N03	**6N03**	12N03	**26N03**	**115N03**
5	± 2	2N05	5N05	**6N05**	12N05	**26N05**	**115N05**
8	± 3	2N08	5N08	**6N08**	12N08	**26N08**	**115N08**
10	± 3	2N010	5N010	**6N010**	12N010	**26N010**	**115N010**
15	± 3	2N015	5N015	**6N015**	12N015	**26N015**	**115N015**
20	± 4	2N020	5N020	**6N020**	12N020	**26N020**	**115N020**
30	± 8	**2N030**	**5N030**	**6N030**	**12N030**	**26N030**	**115N030**
45	± 10	2N045	5N045	**6N045**	12N045	**26N045**	**115N045**
60	± 12	**2N060**	5N060	**6N060**	12N060	**26N060**	**115N060**
75	± 15	2N075	5N075	**6N075**	12N075	**26N075**	**115N075**
90	± 15	2N090	5N090	**6N090**	12N090	**26N090**	**115N090**
120	± 30	2N0120	5N0120	**6N0120**	12N0120	**26N0120**	**115N0120**
150	± 30	2N0150	5N0150	**6N0150**	12N0150	**26N0150**	**115N0150**
180	± 40	2N0180	5N0180	**6N0180**	12N0180	**26N0180**	**115N0180**

NORMALLY CLOSED CONTACTS*

2	± 1	2C2	5C2	6C2	12C2	26C2	115C2
3	± 1	2C3	5C3	**6C3**	12C3	**26C3**	**115C3**
5	± 2	2C5	5C5	**6C5**	12C5	**26C5**	**115C5**
8	± 3	2C8	5C8	**6C8**	12C8	**26C8**	**115C8**
10	± 3	2C10	5C10	**6C10**	12C10	**26C10**	**115C10**
15	± 3	2C15	5C15	**6C15**	12C15	**26C15**	**115C15**
20	± 4	2C20	5C20	**6C20**	12C20	**26C20**	**115C20**
30	± 8	2C30	5C30	**6C30**	12C30	**26C30**	**115C30**
45	± 10	2C45	5C45	**6C45**	12C45	**26C45**	**115C45**
60	± 12	2C60	5C60	**6C60**	12C60	**26C60**	**115C60**
75	± 15	2C75	5C75	**6C75**	12C75	**26C75**	**115C75**
90	± 15.	2C90	5C90	**6C90**	12C90	**26C90**	**115C90**
120	± 30	2C120	5C120	**6C120**	12C120	**26C120**	**115C120**
150	± 30	2C150	5C150	**6C150**	12C150	**26C150**	**115C150**
180	± 40	2C180	5C180	**6C180**	12C180	**26C180**	**115C180**

*Boldface type indicates most popular types.

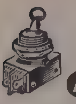
FLASH RELAYS

Similar in appearance to relays listed above. Glass enclosed-hermetically sealed. AC-DC or pulsating current. Flashers operate approximately ⅓ on, ⅔ off. Percentage time on can be increased by reducing the voltage of the heater. Flashers available from 30 to 90 flashes per minute in standard or 9-pin miniature types. Number following letter "F" denotes flashes per minute (e.g., 6F30- -normally closed 30 FPM). Net Each....... **$2.40**

Tolerance FPM – 20° C.	6.3 V. Heater V. Stand.	6.3 V. Heater V. Min.	26 V. Heater V. Stand.	26 V. Heater V. Min.	115 V. Heater V. Stand.	115 V. Heater V. Min.
± 10	6F30	6F30T	26F30	26F30T	115F30	115F30T
± 12	6F45	6F45T	26F45	26F45T	115F45	115F45T
± 15	6F60	6F60T	26F60	26F60T	115F60	115F60T
± 15	6F75	6F75T	26F75	26F75T	115F75	115F75T
± 20	6F90	6F90T	26F90	26F90T	115F90	115F90T

Switches and Timing Relays

ARROW-HART AND HEGEMAN SWITCHES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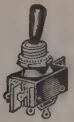
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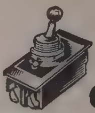
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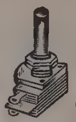
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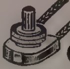
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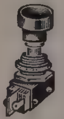
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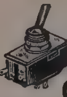
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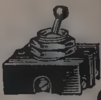

H

A.H. & H. No.	Fig.	Poles	A.	Handle	Bush. In.	See Note	Net Each 1-24	Net Each 25-49	Net Each 50 up
3595	...	SPDT	1	P.B.	9/16	b,k,m	$1.27	$1.06	$0.98
3599-E	...	DPDT	1	P.B.	9/16	b,k,m	1.72	1.43	1.33
3599-G	F	DPDT	1	P.B.	9/16	c,k,m	1.95	1.62	1.50
7775	E	......	1	.....	3/16	a	.30	.27	.25
8000*	...	SPST	6	Ball	.....	e,m	.70	.58	.54
20590-1	...	....	...	On-Off Dial		.....	.05	.04	.03
20902-AJ	B	DPST	1	Bat	13/32	m	1.06	.88	.82
20902-AM	A	DPST	1	Ball	13/32	m	1.06	.88	.82
20902-AZ	A	DPST	1	Ball	3/4	m	1.22	1.01	.94
20902-DN	B	DPST	1	Bat	13/32	m	1.14	.95	.88
20902-Q	A	DPST	1	Ball	1	m	1.21	1.00	.93
20905-AN	B	DPDT	1	Bat	13/32	m	1.21	1.00	.93
20905-BT	A	DPDT	1	Ball	3/4	m	1.33	1.11	1.03
20905-BX	A	DPDT	1	Ball	15/32	m	1.21	1.00	.93
20905-C	A	DPDT	1	Ball	1	m	1.36	1.13	1.05
20905-FR	B	DPDT	1	Bat	15/32	m	1.21	1.00	.93
20905-Z	A	DPDT	1	Ball	13/32	m	1.21	1.00	.93
20905-P	A	DPDT	1	Ball	13/64	m	1.21	1.00	.93
20992-A	A	SPST	3	Ball	13/32	m	.58	.49	.45
20994-FN	...	SPST	3	Bat	13/32	d,m	.70	.58	.535
20994-NV	...	SPST	3	Bat	13/32	m	.58	.49	.45
20994-M	A	SPST	3	Ball	13/32	m	.58	.49	.45
21350-B	A	SPDT	1	Ball	13/32	m	.73	.61	.565
21350-BF	A	SPDT	1	Ball	15/32	m	.73	.61	.565
21350-BP	B	SPDT	1	Bat	13/32	m,v	.81	.675	.625
21350-CF	B	SPDT	1	Bat	13/32	m	.73	.61	.565
21518-B	A	SPST	3	Ball	3/4	m	.70	.58	.54
21615-BD	A	SPST	3	Ball	1	m	.73	.61	.565
21661-B	A	SPDT	1	Ball	1	m	.90	.745	.69
80023-B	A	SPDT	3	Ball	3/4	m	.90	.745	.69
80600-B	C	DPST	6	Ball	5/16	n,o	1.11	.92	.855
80601-BD	...	SPST	10	Bat	15/32	n,o	1.93	1.60	1.485
80602-CA	...	DPST	10	Bat	15/32	n,o	1.96	1.63	1.51
80607	C	SPST	6	Ball	5/16	n,o	1.11	.92	.855
80607-B	C	SPST	6	Ball	15/32	d,n,o	1.11	.92	.86
80618	H	SPDT	6	Ball	5/16	n	1.11	.92	.86
80618-A	H	SPDT	6	Ball	15/32	n	1.11	.92	.86
80638	H	DPDT	5	Ball	3/4	f,n,o	4.10	3.40	3.15
80985	H	4PDT	5	Ball	3/4	f,n,o	8.43	7.00	6.49
81015-BR	H	SPST	3	Bat	13/64	n,t	.77	.63	.59
81015-AZ	...	SPST	3	Ball	13/64	n,r	.77	.63	.59
81021-A	...	SPDT	1	Ball	13/64	n,s	.92	.76	.71
81021	...	SPDT	1	Ball	13/64	d,n	.92	.76	.71
81021-F	...	SPDT	1	Bat	13/32	n,t	$0.92	$0.76	$0.71
81024-KB	G	DPST	3	Bat	15/32	n,t	1.13	.94	.87
81024-DB	...	DPST	3	Ball	1/4	n,t	1.24	1.03	.95
81024-GB	...	DPST	3	Bat	15/32	n,r	1.13	.94	.87
80630*	...	DPST	12	P.B.	.....	b,g,n	1.65	1.37	1.27
81027-CB	G	DPDT	3	Bat	15/32	n,t	1.30	1.08	1.00
81027-A	...	DPDT	3	Ball	13/64	n,t	1.33	1.10	1.025
81027-DK	...	DPDT	3	Bat	1	n,t	1.55	1.285	1.19
81029-HA	...	DPDT	3	Bat	15/32	n,o,t	1.82	1.51	1.40
81045-FB	G	SPST	3	Bat	15/32	e,m,r	1.105	.92	.85
81057	...	DPDT	3	Bat	.....	e,n	1.74	1.45	1.34
81057-F	G	DPDT	3	Bat	15/32	m,r	1.74	1.45	1.34
81076-B	...	SPST	...	P.B.	9/16	b,e,p	1.41	1.17	1.085
81715	...	SPST	3	Roto	3/8	a,n	1.41	1.17	1.085
81715-G	...	SPDT	3	Roto	3/8	a,n	1.41	1.17	1.085
82024-D	G	DPDT	3	Bat	11/32	n	1.74	1.45	1.34
86710	F	SPST	3	P.B.	.....	b,m,x	1.04	.86	.80
86710-C	...	SPST	3	P.B.	.....	c,m	1.235	1.025	.95
1561-BS	D	SPST	3	.....	3/8	a,m	.72	.59	.55
1565-BH	D	SPDT	1	.....	3/8	a,m	.88	.73	.67
1572-AR	D	DPST	1	.....	3/8	a,m	1.20	.99	.92
1575-AG	D	DPDT	1	.....	3/8	a,m	1.36	1.13	1.05
3391	...	SPST	...	.....	9/16	e,h,l	.63	.52	.48
3391-E	...	SPST	...	.....	9/16	e,g,l	.63	.52	.48
3392*	...	DPST	1	P.B.	7/16	b,j,l,m	.80	.66	.62
3392-A*	...	DPST	1	P.B.	7/16	c,j,l,m	1.00	.83	.77
3592	...	SPST	3	.....	9/16	e,g,k,m	1.12	.93	.86
3594-Q	F	DPST	...	P.B.	9/16	c,k,m	1.67	1.39	1.29
3594-QC	F	DPST	...	P.B.	9/16	b,k,m	1.55	1.29	1.19

*Rated 125 volts; all others 250 volts.

Notes: a—Rotary type. **b**—Push-button type less button. **c**—Push-button type with button. **d**—With dial (all others less dial). **e**—Momentary spring action. **f**—Center off. **g**—Normally open. **h**—Normally closed. **j**—One circuit normally open, other circuit normally closed. **k**—Quick make and break. **l**—Slow make and break. **m**—Laminated construction. **n**—Molded construction. **o**—Screw terminals (others have lugs). **p**—With leads. **r**—Back contacts. **s**—Side contacts. **t**—End contacts. **v**—Silver-plated contacts. **x**—Double action.

GV CONTROLS THERMAL TIMING RELAYS

G-V
THERMAL
TIME DELAY
RELAY
TYPE RM-30
HEATER 26
SET FOR 5
CONTACTS-NO
GV CONTROLS

RED LINE THERMAL RELAYS

Long life and reliable mechanisms; fully qualified for industrial control, yet light and inexpensive enough for electronic and communication circuits. Mechanism is stainless steel, differential type; welded integral structure. Shatter-proof; no glass is used. Conservatively designed heating elements of Nichrome wire-wound on mica are encased in stainless steel. Dust-tight metal shell for full protection. Preset intervals are tamper-proof. **When ordering, specify time setting, heater voltage, and NO or NC contacts.**

Standard Time Settings, Seconds	Heater Volts	Net Each, Lots of 1-9	Net Each, Lots of 10-24	Net Each, Lots of 25-49
2, 5, 10, 20, 30, 45	6.3, 26.5, 115	$6.55	$5.76	$5.11
2, 5, 10, 20, 30, 45	230	7.15	6.29	5.58
60, 90	6.3, 26.5, 115	7.00	6.16	5.46
60, 90	230	7.60	6.69	5.93
120	6.3, 26.5, 115	7.60	6.69	5.93
120	230	8.20	7.22	6.40
150, 180	6.3, 26.5, 115	8.15	7.17	6.36
150, 180	230	8.75	7.70	6.83

HERMETICALLY SEALED RELAYS

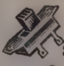
Series R Thermal Time Delay Relays: Adjustable for delay intervals from a few seconds to 5 minutes without affecting hermetic seal. Rugged construction meets military and aircraft requirements. Small, lightweight design; interchangeable on DC or AC of any frequency; at low and high ambient temperatures, −70° C to +100° C and up to 150° C under certain conditions. Available in miniature 7-pin (Series RM), standard octal (Series RO), and flanged type panel mount (Series RF) similar to 9-pin tube socket.

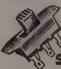
Series H Hot Wire Time Delay Relays: Adjustable design for intervals from 0.1 to 4 seconds with very rapid recovery. Small, sturdy and dependable. For AC or DC energization regardless of frequency, over −70° C to +100° C ambient temperature range. Will replace SPST magnetic relays. Shock- and vibration-resistant. Plug-in, 7-pin miniature (Series HM), or flanged, panel mounting type with solder lugs (Series HF). Size: 3/4" dia. x 2 3/8" h.

Series T Voltage and Current Sensing Thermal Relays: Operate contacts when current passing through circuits exceeds a set value. Have adjustable settings over a wide range. Independent of frequency, units operate on either AC or DC. Noiseless, small and lightweight; will operate in any position. Inherent thermal lag permits brief, transient changes, yet operates a small, continuous change. Miniature 7-pin socket (Series TM), flanged, panel mount with solder lugs (Series TF); or standard octal socket (Series TO). **When ordering, specify type, basic time, heater voltage and NO or NC contacts.**

GV Type	Basic Time Setting, Seconds	Net Each, Lots of 1-9	Net Each, Lots of 10-24	Net Each, Lots of 25-49
RM, RO	20, 30, 40, 60, 80, 120, 160	$12.90	$11.35	$10.06
RF	20, 30, 40, 60, 80, 120, 160	13.55	11.92	10.57
TM, TO	06, 10	16.15	14.21	12.60
TF	06, 10	16.80	14.78	13.10
HM	01, 04	19.25	16.94	15.02
HF	01, 04	19.90	17.51	15.52

WIRT SLIDE SWITCHES


SW723

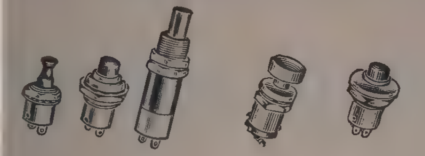

SW726

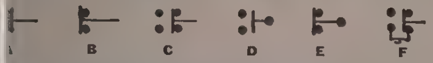
Series 700 widely used in radios, television sets, phonographs, recorders, small instruments, etc. Series 300 heavy duty 3-amp switches designed for fractional horsepower motors and motor driven appliances. Bakelite base insures high resistance to leakage. Solid bakelite activator knob provides extra strength. Tin plated steel housings, other finishes available. All contacts silver plated. **Size:** .547" w. x 1" d. x 1.406" l., overall. **Mounting Centers:** 1 1/8" center-to-center. U/L Inspected.

Wirt No.	Contact	Rating Amps	Rating Volts	Number Terminals	Net Each
SW-723	SPST	.75	125 AC/DC	2	12c
SW-724	SPDT	.75	125 AC/DC	3	15c
SW-725	DPST	.5	125 AC/DC	4	18c
SW-726	DPDT	.5	125 AC/DC	6	21c
SW-323	SPST	3	125 AC	2	15c
SW-324	SPDT	3	125 AC	3	18c
SW-325	DPST	3	125 AC	4	21c
SW-326	DPDT	3	125 AC	6	24c

HETHERINGTON Switches

HETHERINGTON SNAP-ACTION PUSH BUTTON SWITCHES





"JR SERIES" (MOMENTARY CONTACT)

olications: Aviation, military and industrial. **Case:** Anodized minum. **Moisture-and-Dust Proof. Vibration and Shock Re-ance:** Can be subjected to over 50G shock, and will withstand e amplitude vibrations up to 55 cps. **Positive Contact:** Pat-ed snap-action mechanism cannot be teased on or off contact. ntact surfaces are of heavy silver overlay on copper base. **Ter-nals:** Heavy silvered terminals molded in phenolic and cannot torn loose by heavy wires. **Hardware:** Lugs (fits #14 gauge e), 2-56 mounting screws and lockwashers furnished. **Operating ssure:** 4 lbs. ± 1 lb. **Total Button Travel:** Approx. 0.085". **ing:** See table below. **Size:** 55/64" l. (less button) x 9/16" dia. ight, Approx. 1/4 oz.

BASIC SWITCHES

Ratings	Hetherington Basic No. C100	C3100	C200	A800‡	A11200‡	C4100
120 v. AC	15 a.	15 a.	15 a.	‡	‡	15 a.
240 v. AC	7.5 a.	7.5 a.	7.5 a.	‡	‡	7.5 a.
28 v. DC						
. Life Load*						
00 Resistive	17 a.	17 a.	10 a.	10 a.	10 a.	10 a.
00 Inductive	10 a.	10 a.	8 a.	8 a.	8 a.	8 a.
00 Inductive†	5 a.	5 a.	3 a.	3 a.	3 a.	1 a.
00 Lamp	4 a.	4 a.	3 a.	3 a.	3 a.	4 a.
00 Motor	10 a.	10 a.	10 a.	10 a.	10 a.	10 a.

a level, except indicated otherwise. †50,000 ft. ‡Not U/L In-ted. Center terminal current, 3 amps.

PUSH BUTTONS

2 Button—Size: 5/16" dia. x 5/16" h. Momentary contact.
6 Button—Size: 5/16" dia. x 3/16" h. Momentary contact.
7 Button—Size: 5/16" dia. x 1/2" h. Push-pull maintained contact.
8 Button—Size: 3/8" dia. x 3/8" h. Momentary contact.
[illegible] Button—Size: 7/16" dia. x 5/16" h. Momentary contact.

MOUNTING ADAPTERS

ew onto switch in place of nut and lockwasher. Switch may be oved from equipment without disturbing adapter, surrounding ponents, or marring the panel. Mounting hardware supplied.

AUXILIARY PUSH BUTTON

on top of a standard button in the basic switch.
Aux. Button—5/16" protrusion. Round top.
Aux. Button—5/16" protrusion. Flat top.
Aux. Button—5/16" protrusion. Round top.

dapter Type	Aux. pb Avail.	Button Protrusion	Mtg. Hole Dia.	Adapter Length, Overall x Behind Panel
A†	#2, #3	3/8"	5/8"	7/16" x 3/16"
	#4	1/4"	5/8"	7/16" x 3/16"
B*†	#9	5/16"	5/8"	3/8" x 1/4"
D†	#2, #3	1/4"	5/8"	9/16" x 3/8"
	#4	1/8"	5/8"	9/16" x 3/8"
E*†	#2, #3	3/16"	5/8"	5/8" x 7/16"
F*‡	#2, #3	3/16"	3/4"	5/8" x 7/16"
H*§	#2, #3	5/16"	11/16"	1/2" x 7/16"
	#4	3/16"	11/16"	1/2" x 7/16"
J*§	#2, #3	5/16"	4/5"	1/2" x 7/16"
	#4	3/16"	4/5"	1/2" x 7/16"
N#	#2, #3	5/16"	9/16"	1/2" x 1/8"
	#4	3/16"	9/16"	1/2" x 1/8"
P*†	#2, #3	5/16"	5/8"	1/2" x 5/16"
	#4	3/16"	5/8"	1/2" x 5/16"
Q*††	#2, #3	5/16"	3/4"	39/64" x 21/64"
	#4	3/16"	3/4"	39/64" x 21/64"
U†	#2, #3	5/16"	5/8"	1/2" x 5/16"
	#4	3/16"	5/8"	1/2" x 5/16"
W*§§	#2, #3	5/16"	5/8"	1/2" x 5/16"
	#4	3/16"	5/8"	1/2" x 5/16"

apter flange can be engraved with 1/8" high letters. †5/8-24 EF-2B nut. ‡3/4-32 NS-2 nut. §Press fit. #Has 2 positioning hes (1/16 R.) for press fit mtg. in stick grips. ††Spring clip mtg. iv. to NAS350. §§For front-of-panel, blind-hole mtg. Secured self-tapping screw in flange (#2 Phillips flat hd.).

CONTACT ARRANGEMENTS WITHOUT ADAPTERS

circuits and contacts, see table above. Each switch furnished 1/2-32 nut and lockwasher.

ther. ic No.	*Net Each, Lots of 1-9	10-24	25-49	50-99	†Net Each, Lots of 1-9	10-24	25-49	50-99
0	$3.01	$2.56	$2.26	$2.11	$3.18	$2.70	$2.39	$2.23
100	3.01	2.56	2.26	2.11	3.18	2.70	2.39	2.23
10	3.61	3.07	2.71	2.53	3.78	3.21	2.84	2.65
10	3.61	3.07	2.71	2.53	3.78	3.21	2.84	2.65
200	3.61	3.07	2.71	2.53	3.78	3.21	2.84	2.65
00	3.76	3.20	2.82	2.64	3.93	3.34	2.95	2.76

ludes switch, push button No. 2, No. 6, No. 7, or No. 8.
ludes switch, push button No. 9.

CONTACT ARRANGEMENTS WITH ADAPTERS

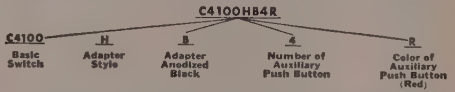
Hether. Basic No.*	Circuit	Contacts	†Net Each, Lots of 1-9	10-24	25-49	50-99
C100	A	SPST, NO	$3.76	$3.20	$2.82	$2.64
C3100	B	SPST, NC	3.76	3.20	2.82	2.64
C200	C	2-circuit	4.36	3.71	3.27	3.06
A800	D	3-terminal, NO	4.36	3.71	3.27	3.06
A11200	E	3-terminal, NC	4.36	3.71	3.27	3.06
C4100	F	SPDT	4.52	3.84	3.39	3.17

*Not a complete part number. To order complete adapter switches see **HOW TO ORDER** section. †Include switch, adapter, and push button. For anodized adapter, add the following amounts in each column: **$0.07, $0.06, $0.05, $0.05.**

HOW TO ORDER "JR SERIES" SWITCHES

A. COMPLETE "JR" SERIES ADAPTER SWITCH: 1. Select contact arrangement, i.e., C100, C200, etc. 2. Select mounting adapter, i.e., A, B, etc. 3. Select adapter color, i.e., B—Black, G—Green, M—Magenta, R—Red, Y—Yellow, BL—Blue, BN—Brown. If color is not required, omit his step. 4. Select auxiliary push button, i.e., No. 2, No. 3, No. 4. 5. Select button color. If black plastic button is required, omit this step. 6. Combine these steps in order. Example: C4100HB4R denotes JR Series switch with C4100 contact (SPDT), black anodized type H adapter and a red No. 4 auxiliary push button.

B. BASIC "JR" SERIES SWITCH WITHOUT ADAPTERS: 1. Select contact arrangement, i.e., C100, C3100, C200, etc. 2. Select push button style, i.e., No. 2, No. 6, No. 7, etc. Example: C2008 denotes a "JR" series switch with C200 contact (2-circuit) using a black No. 8 push button. For other color, suffix color designation (see A. 3. above).


C4100HB4R
C4100
Basic Switch
H
Adapter Style
B
Adapter Anodized Black
4
Number of Auxiliary Push Button
R
Color of Auxiliary Push Button (Red)

SERIES W100 (MOMENTARY CONTACT)

Similar to "JR" series but designed and built in accordance with MIL-S-6743, Drawing MS-25089. Silicone rubber sleeve offers complete moisture-and-dust proofing. Can be subjected to +20G vibration at 5 to 2,000 cps without contact chatter in any position of button travel. Total button travel with Type L adapter, approx. 7/16". Rated at 28 v. DC, 10 amps (resistive load), 5 amps (inductive load), 3 amps (lamp load). Weight with Type L adapter, approx. 3/4 oz. Other specifications, see "JR" series description.

CONTACT ARRANGEMENTS

Hether. No.*	Circuit	MS-25089 No.	Contacts	†Net Each, Lots of 1-9	10-24	25-49	50-99
W101	A	None	SPST, NO	$4.83	$4.11	$3.62	$3.39
W102	B	None	SPST, NC	4.83	4.11	3.62	3.39
W103	C	MS-25089-3	2-circuit	5.45	4.62	4.07	3.81
W104	D	MS-25089-4	3-term., NO‡	5.45	4.62	4.07	3.81
W105	E	MS-25089-5	3-term., NC‡	5.45	4.62	4.07	3.81
W106	F	None	SPDT	5.59	4.75	4.19	3.92

*Not a complete part number. To order complete adapter switch, see HOW TO ORDER section. †Includes switch, adapter, and push button. For L type adapter, add following amounts in each column: **$0.61, $0.51, $0.46, $0.43.** ‡Center term. current, 3 amps.

MOUNTING ADAPTERS

Adapter Type	Corresponds to	Adapter Type	Corresponds to
M*	MS-25089 Type A	U†	MS-25089 Type D (Inactive)
N§§	MS-25089 Type B	W#	MS-25089 Type F
P†‡	MS-25089 Type C	Y‡††	MS-25089 Type E
PA§	MS-25089 Type G	L	‡‡

*Force-fit mtg. in stick grips, etc. †Back-of-panel mtg. ‡Flange can be engraved to order. §Back-of-panel mtg. in MIL-P-7788 edge-lit panels. #Front-of-panel mtg. ††Front-of-panel, blind-hole mtg. Secured by self-tapping screw through flange. ‡‡Limit-switch application. Can only be supplied with special No. 5 push button. Button pre-travel, 0.09" ± 0.02". Over-travel, 5/16". Has two 1/2-32 NS-2 hex nuts for positioning. Size, 2 19/64" l. overall; 7/16" button protrusion; 5/16" button dia. §§Two positioning notches for force-fit mtg. in stick grips, etc.

PUSH BUTTONS

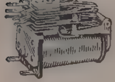
Plastic push button. Black or red color. Other colors available on order.
No. 6 Button—Meets MS-25089 requirements. **Size:** 3/8" dia. x 1/4" h.
No. 3 Button—Size: 3/8" dia. x 5/16" h.
No. 4 Button—Size: 3/8" dia. x 3/16" h.

HOW TO ORDER W100 SERIES SWITCHES

1. Select contact arrangement, i.e., W101, etc. 2. Select mounting adapter, i.e., M, N, etc. 3. Select adapter color, i.e., B for black anodized aluminum. If color is not required, omit this step. 4. Select push button style, i.e., No. 6 (required by MS-25089), No. 3, or No. 4. Limit-switch type with type "L" adapter can only be furnished with special No. 5 push button. Specify No. 5 on all orders for type "L" adapter. 5. Select button color, i.e., B—Black (Standard), R—Red. 6. Combine these steps in order. Example: W103PB6R denotes a Series W100 switch with W103 contact (2-circuit) using a black anodized type "P" adapter and a red No. 6 push button.

Button Guards to protect "JR" and W100 Series switches from accidental operation available. Sizes vary with adapters. Write for information and prices.

Potter & Brumfield RELAYS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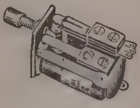
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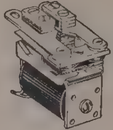
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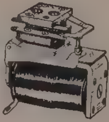
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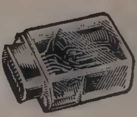
MG


MG 17DP

MH

TELEPHONE TYPE RELAYS

The size, sensitivity, wide variety of coils and ability to carry a large number of poles make them ideal for automation, computers and similar applications.

LS Series: Short springs, light weight armature for fast action with reliability, long life. Stainless steel hinge bearing gives 100 million operations. Twin palladium contacts rated 4 amps. Four 6-32 mtg. holes on ¾" x $\frac{5}{16}$" centers. Size, 2⅜" x 1$\frac{5}{32}$" x 1½".

MA Series: Mechanical latch on impulse to coil; manual reset. Available with multiple contacts and DC coils. Silver contacts rated 5 amps. Two 4-40 mtg. holes on ⅜" centers. Size, 2½" x $\frac{25}{32}$" x 1⅜". Weight, 2¼ oz.

MB Series: Miniature DC contactor for very high current uses. Heavy brass arms with silver contacts rated 60 amps.; solder terminals. Four 3-48 mtg. holes on ⅜" centers. Size, 1$\frac{21}{32}$" x $\frac{27}{32}$" x 1$\frac{13}{32}$". Weight, 2 oz.

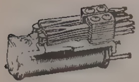
MC Series: Low loss at high frequency using ceramic spacers; intercontact capacitance, 1.5 $\mu\mu$f. DC types withstand 10G vibration up to 300 cps and 25G shock. Palladium contacts rated 1 amp. Four 3-48 mtg. holes on ⅜" centers. Size, 1$\frac{15}{32}$" x ¾" x 1$\frac{9}{16}$". Weight, 2 oz.

MG Series: Subminiature relay for aircraft, computer, etc.; has good shock and vibration resistance. Open or covered in plastic dust cover. Silver contacts rated 2 amps. Open model mounts with four 3-48 holes on ⅜" center. Covered model (MG17DP) has plug-in header to fit Amphenol No. 57-20140 receptacle. Size, 1$\frac{7}{32}$" x $\frac{11}{16}$" x 1$\frac{3}{32}$", open; 2$\frac{1}{64}$" x $\frac{13}{16}$" x 1$\frac{47}{64}$", covered. Weight, 1.2 oz. open; 2.0 oz. covered.

MH Series: Fast acting, long life miniature. DC models withstand .065" vibration to 55 cps; open AC models for intermittent duty only; sealed AC units have built-in rectifier. Fine silver contacts rated 5 amps. No. MH11L mounts on 6-32 stud, $\frac{11}{32}$" long with locating boss; open models have four 3-48 holes on ⅜" centers. Size, 1$\frac{9}{16}$" x 1⅝" x $\frac{25}{32}$". Weight, 2 oz. open; 4 oz. sealed.

P & B No.	Contact	Coil Voltage or Current	Net Each
LS17D	4PDT	6, 12 or 24 v. DC	$ 9.50
LS17D	4PDT	110 v. DC	10.50
LS23D	6PDT	6, 12 or 24 v. DC	12.10
LS23D	6PDT	110 v. DC	13.10
MA17D	4PDT	6, 12, or 24 v. DC	7.95
MA17D	4PDT	110 v. DC	8.45
MB3D	SPST-NO-DB	6 v. DC	5.15
MB3D	SPST-NO-DB	12 or 24 v. DC	5.25
MB3D	SPST-NO-DB	110 v. DC	5.65
MC5A	SPDT	6 or 115 v. AC	4.75
MC11A	DPDT	6 or 115 v. AC	6.55
MC5D	SPDT	6, 12 or 24 v. DC	4.20
MC11D	DPDT	6, 12 or 24 v. DC	6.05
MC11D	DPDT	110 v. DC	6.55
MG11D	DPDT	6, 12 or 24 v. DC	4.95
MG11D	DPDT	110 v. DC	5.40
MG17D	4PDT	6, 12 or 24 v. DC	6.60
MG17D	4PDT	110 v. DC	7.05
MG17DP†	4PDT	6, 12 or 24 v. DC	11.00
MG17DP†	4PDT	110 v. DC	11.60
MH17A	4PDT	6, 12 or 24 v. AC	6.75
MH17AMR*	4PDT	24 v. AC	25.00
MH17AMR*	4PDT	115 v. AC	19.00
MH11L	DPDT	4.5 ma.; 10K ohms, resis.	5.75
MH11LM*	DPDT	4.5 ma.; 10K ohms, resis.	9.70
MH17D	4PDT	6, 12 or 24 v. DC	5.75
MH17DM*	4PDT	6, 12 or 24 v. DC	11.60
MH23D	6PDT	6, 12 or 24 v. DC	7.25
MH23D	6PDT	110 v. DC	7.75
MH23DD*	6PDT	6, 12 or 24 v. DC	15.50
MH23DD*	6PDT	110 v. DC	16.10

*Sealed relays. †Enclosed relay.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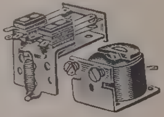
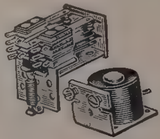
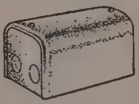
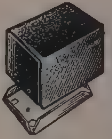

2PDT Switch GPA Coil


4PDT Switch GPD Coil


PR Cover


MS/MR Cover

"P" Case

TELEPHONE TYPE RELAYS—RELAY KITS—ACCESSORIES

BS SERIES LONG COIL RELAYS

Long coil, telephone type for high sensitivity, simplified maintenance and long life. Suited for computer and automatic test equipment applications requiring large numbers of poles. Tinned solder type terminals for rear panel wiring. Twin palladium contacts rated 4 amps. Two 8-32 mounting holes on ¾" centers. Size, 1$\frac{1}{32}$" x 4⅛" x 2$\frac{1}{16}$". Weight, 9 oz.

P & B No.	Contact	Coil Voltage or Current	Net Each
BS17A	4PDT	115 v. AC	$12.35
BS23A	6PDT	115 v. AC	15.40
BS17D	4PDT	6, 12, or 24 v. DC	11.65
BS17L	4PDT	5.5 ma. at 10,000 ohms	12.30
BS23D	6PDT	6, 12 or 24 v. DC	13.75
BS23L	6PDT	7.6 ma. at 10,000 ohms	14.90

PR DUST COVER

Sheet steel base with aluminum cover; finished in gray hammertone baked enamel. Four knockouts for ½" conduit. Three #10 holes on 1⅞" x 4⅛" centers, for mounting.
P & B No. 35D013—Net Each........................ $\$2^{85}$

MS/MR DUST COVER ASSEMBLY

Dust cover snaps onto metal base for applications where dust or dirt is a complicating factor. Relay is mounted on base of the enclosure. Can be used with MR, MS and SP relays.
P & B No. 35D076—Net Each........................ $\$1^{80}$

GP SERIES "PIC & BUILD" KITS

Extra flexibility permitted using separate coils and switches for intercombinations of up to 20 types of relays. Permits easy, rapid changing of coils for different sensitivities; switches for variable contact arrangements. Silver contacts rated 5 amps. Mounts with 8-32 tapped core and locating half-punch. Weight, 4 oz. average.

P & B No.	Description	Net Each
GPA	6, 12, 24 or 115 v. AC coil	$1.55
GPA	230 v. AC coil	2.00
GPD	6, 12 or 24 v. DC coil	2.00
GPD	110 v. DC coil	3.00
GPD	2500-ohm coil	1.45
GPD	10,000-ohm coil	2.00
GP11	2PDT switch	1.60
GP17	4PDT switch	2.80

"P" CASE

Clear polystyrene case for mounting combinations or individual rectifiers, capacitors or resistors. Available with octal-type plug with 8 or 11 pins; complete with four screws.
P & B No. 35D070—8-pin plug type. Net Each.......... 50¢
P & B No. 35D072—11-pin plug type. Net Each........ 65¢

COIL BOBBIN KIT

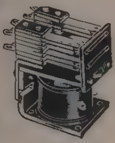
Potter & Brumfield

Assortment of molded phenolic bobbins. Includes three each of eight different sizes (24 bobbins in all). Core diameters from $\frac{7}{32}$" to $\frac{7}{16}$" sizes.
P & B No. 75A047 Kit—Net Ea.. $\$2^{50}$

RELAYS *All Types — All Sizes — for All Applications*

GENERAL PURPOSE RELAYS

AG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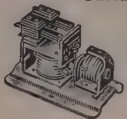
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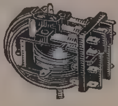
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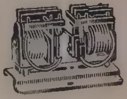
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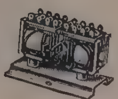

KE

KF

in automation, machine tool control, counters, radio trans-'s; single and multiple contact versions.

eries: Balanced armature relay enclosed in dust cover. Screw ials molded in phenolic base. All AC models carry U/L and labels. Silver contacts rated 5 amps. Welded mounting et has two $\frac{3}{16}$" dia. holes on $2\frac{3}{8}$" x $\frac{5}{8}$" diagonal centers. $2\frac{11}{32}$" x $1\frac{15}{16}$" x $3\frac{5}{32}$". Weight, $9\frac{1}{2}$ oz.

eries: Multiple leaf, all-purpose relay permits a wide range itact combinations. Silver contacts rated 5 amps. Mounts 2 tapped core with locating boss. Size, $1\frac{1}{16}$" x $1\frac{23}{32}$" x $1\frac{25}{32}$". it, $3\frac{1}{2}$ oz.

eries: Overload relay equipped with 6 v., 60 cps AC reset coil 0 ma DC trip coil for protection of expensive tubes, instru-, etc. Externally mounted rheostat (not supplied), may be o adjust remotely the trip current over 100-1,000 ma range. contacts rated 5 amps. Complete instructions supplied. $2\frac{3}{8}$" x $2\frac{15}{16}$" x $1\frac{25}{32}$". Weight, $6\frac{1}{2}$ oz.

eries: Small, low cost, highly efficient relay handles light loads. All AC models carry U/L and CSA labels. Silver cts rated 5 amps. Single 6-32 mtg. stud and locating tab. $1\frac{15}{32}$" x $1\frac{11}{16}$" x $1\frac{27}{32}$". Weight, 2 oz.

eries: Latching relay has release and trip coils at the same e; one sets latch, the other releases it. Ideal for memory and ad uses. Operates on momentary impulse to either coil. contacts rated 5 amps.; suffix "G" indicates silver cadmium cts on movables rated 10 amps. AC relays with 5 amp. con-carry U/L and CSA labels. Two $\frac{5}{32}$" holes on $1\frac{3}{8}$" mtg. s. Size, $1\frac{25}{32}$" x $2\frac{15}{16}$" x $2\frac{3}{32}$". Weight, 6 oz.

ries: Miniature dual coil latching relay has mechanical latch, c release; operates on momentary impulse to either coil. termittent duty only. Silver contacts rated 2 amps. Sealed les on $1\frac{1}{16}$" centers. Size: Open—$1\frac{7}{8}$" x $1\frac{3}{8}$" x $1\frac{5}{16}$". Closed— $1\frac{11}{16}$" x $1\frac{1}{32}$". Weight, 4 oz. open model; 6 oz. sealed.

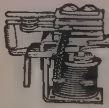
ries: Unusual design has many contact combinations (up to T) with common movable arm. Palladium contacts against rated 2 amps. Mounts on 6-32 core hole with locating tab. $1\frac{1}{8}$" x $1\frac{5}{8}$" x $1\frac{3}{32}$". Weight, $1\frac{1}{4}$ oz.

P & B No.	Contacts	Coil Voltages	Net Each
AG11AY	DPDT	12 or 115 v. AC	$ 8.75
AG11D	DPDT	24 v. DC	8.65
GA11A	DPDT	6, 12, 24 or 115 v. AC	3.20
GA14A	3PDT	6, 12, 24 or 115 v. AC	3.85
GA17A	4PDT	6, 12, 24 or 115 v. AC	4.60
GA17A	4PDT	230 v. AC	5.00
GA11D	DPDT	6, 12 or 24 v. DC	3.20
GA11D	DPDT	110 v. DC	3.65
GA14D	3PDT	6, 12 or 24 v. DC	3.85
GA17D	4PDT	6, 12 or 24 v. DC	4.60
GA17D	4PDT	110 v. DC	5.05
GC11A	DPDT	6 or 115 v. AC	8.50
KA5AY	SPDT	6, 12, 24 or 115 v. AC	3.05
KA5AY	SPDT	230 v. AC	3.45
KA11AY	DPDT	6, 12, 24 or 115 v. AC	3.65
KA11AY	DPDT	230 v. AC	4.05
KA14AY	3PDT	6, 12, 24 or 115 v. AC	4.05
KA14AY	3PDT	230 v. AC	4.45
KA5D	SPDT	6, 12 or 24 v. DC	2.90
KA5D	SPDT	110 v. DC	3.50
KA11D	DPDT	6, 12, or 24 v. DC	3.25
KA11D	DPDT	110 v. DC	3.85
KA14D	3PDT	6, 12 or 24 v. DC	3.65
KA14D	3PDT	110 v. DC	4.25
KB17AG	4PDT	6, 12, 24 or 115 v. AC	10.10
KB17AG	4PDT	230 v. AC	10.90
KB17AY	4PDT	6, 12, 24 or 115 v. AC	10.00
KB17AY	4PDT	230 v. AC	10.80
KB23AG	6PDT	6, 12, 24 or 115 v. AC	12.20
KB23AG	6PDT	230 v. AC	13.00
KB23AY	6PDT	6, 24 or 115 v. AC	12.00
KB23AY	6PDT	230 v. AC	12.80
KB17D	4PDT	6, 12 or 24 v. DC	9.00
KB17D	4PDT	110 v. DC	10.20
KB17DG	4PDT	6, 12 or 24 v. DC	9.20
KB17DG	4PDT	110 v. DC	10.40
KB23D	6PDT	6, 12 or 24 v. DC	10.90
KB23D	6PDT	110 v. DC	12.10
KB23DG	6PDT	6, 12 or 24 v. DC	11.20
KB23DG	6PDT	110 v. DC	12.40
KE17D	4PDT	6, 12 or 24 v. DC	9.00
KE17DM	4PDT	6, 12 or 24 v. DC	19.50
KE23D	6PDT	6, 12 or 24 v. DC	11.50
KE23DM	6PDT	6, 12 or 24 v. DC	25.00
KF20D	5PDT	6, 12 or 24 v. DC	2.75
KF20D	5PDT	110 v. DC	3.35

KM

KRP

LK
Sealed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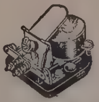

MS

Series: Subminiature 3-pole relay for multiple switching. For here size and weight are critical factors. Silver contacts rated os. Solder lug terminals. Has 2-56 tapped core and locating or mounting. Size, $\frac{63}{64}$" x $1\frac{1}{8}$" x $\frac{35}{64}$". Weight, $\frac{7}{8}$ oz.

Series: Versatile, multi-contact arrangements in polystyrene cover. Mounts by standard octal 8-pin plug on KRP5 and 11 models; 11-pin on KRP14. Silver contacts rated 5 amps. $1\frac{13}{32}$" x $1\frac{13}{32}$" x 2" above plug. Weight, 3 oz. Suffix "G" indi- silver cadmium oxide contacts on movables. Rated at mps.

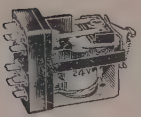
Series: Hermetically sealed latching relay with 4PDT con- Mechanical latch, electrical release. Silver contacts rated ps. Glass insulated solder terminals. Three 8-32 mtg. studs $\frac{}{2}$" x $\frac{1}{2}$" centers. Size, $1\frac{3}{16}$" x $3\frac{1}{16}$" x $2\frac{3}{16}$". Weight, $6\frac{1}{2}$ oz.

Series: Snap action relay for starting split-phase capacitor rs up to $1\frac{1}{2}$ hp. Silver contacts rated 15 amps. Four 6-32 mtg. on $\frac{3}{4}$" x $\frac{7}{8}$" centers. Size, $1\frac{1}{4}$" x $2\frac{5}{16}$" x $1\frac{7}{8}$". Weight, $3\frac{1}{2}$ oz.

Series: Motor starting relays for capacitor-start induction-otors. Operates on back EMF or running winding Armature an be altered to change pull-in. Meets all U/L requirements. $\frac{5}{32}$" mounting holes on $1\frac{9}{16}$" centers. Size, $2\frac{1}{8}$" x $2\frac{1}{16}$" x $2\frac{1}{2}$". nt, 5 oz.

P & B No.	Contacts	Coil Voltages	Net Each
KM5D	SPDT	6, 12 or 24 v. DC	$ 3.20
KM11D	DPDT	6, 12 or 24 v. DC	3.50
KM14D	3PDT	6, 12 or 24 v. DC	4.05
KRP5A	SPDT	6, 24 or 115 v. AC	5.20
KRP5AG	SPDT	6, 24, or 115 v. AC	5.30
KRP11A	DPDT	6, 12, 24 or 115 v. AC	5.75
KRP11A	DPDT	230 v. AC	6.15
KRP11AG	DPDT	6, 12, 24 or 115 v. AC	5.95
KRP14A	3PDT	6, 12, 24 or 115 v. AC	7.15
KRP14A	3PDT	230 v. AC	7.55
KRP14AG	3PDT	6, 12, 24 or 115 v. AC	7.45
KRP5D	SPDT	6, 12 or 24 v. DC	5.15
KRP5D	SPDT	110 v. DC	5.75
KRP5DG	SPDT	6, 12, or 24 v. DC	5.25
KRP5DG	SPDT	110 v. DC	5.85
KRP11D	DPDT	6, 12 or 24 v. DC	5.70
KRP11D	DPDT	110 v. DC	6.30
KRP11DG	DPDT	6, 12 or 24 v. DC	5.90
KRP11DG	DPDT	110 v. DC	6.50
KRP14D	3PDT	6, 12 or 24 v. DC	7.10
KRP14D	3PDT	110 v. DC	7.70
KRP14DG	3PDT	6, 12 or 24 v. DC	7.40
KRP14DG	3PDT	110 v. DC	8.00
LK17AH	4PDT	115 v. AC	19.00
LK17DH	4PDT	24 v. DC	18.50
MP5A	SPDT	6, 12, 24 or 115 v. AC	5.70
MP5A	SPDT	230 v. AC	5.95
MP5D	SPDT	6, 12 or 24 v. DC	5.70
MP5D	SPDT	110 v. DC	6.50
MS2AY	SPST-NC	115 v. AC for $\frac{3}{4}$ hp motor	3.40
MS2AY	SPST-NC	230 v. AC for $\frac{3}{4}$ hp motor	3.80
MS4AY	SPST-NC-DB	115 v. AC for 3 hp motor	3.95
MS4AY	SPST-NC-DB	230 v. AC for 3 hp motor	4.35

Potter & Brumfield RELAYS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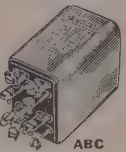
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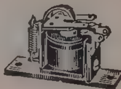
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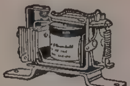
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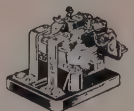
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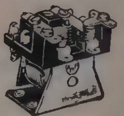
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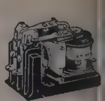

SP

POWER TYPE RELAYS

(ALSO SEE MB SERIES UNDER TELEPHONE TYPES)

Used in automation, motor starting, clutch operation, signaling, etc., wherever power from 5 to 20 amps. 115 v. AC non-inductive must be handled.

AB Series: For appliance and general purpose uses where rugged construction, long life and quiet operation are required. All AC models carry U/L and CSA labels. Silver contacts rated 10 amps. Two 8-32 mounting holes on 1¼″ centers. Size, $1\frac{15}{16}$″ x 3″ x $1\frac{13}{32}$″. Weight, 8 oz.

ABC Series: Medium duty for small motor, industrial control, etc. With dust cover; terminals fit clip-on connectors for use in printed circuit dip soldering; snap-on and screw-on connectors also supplied. AC models carry U/L and CSA labels. Silver contacts rated 10 amps. Two 8-32 mtg. studs ⅜″ long. Size, $1\frac{31}{64}$″ x $2\frac{25}{32}$″ x $2\frac{3}{32}$″, less terminals. Weight, 7 oz.

CA Series: Low cost, high capacity types are small size. Solder terminals. Fine silver contacts rated 10 amps. Two $\frac{3}{16}$″ mtg. holes on $2\frac{7}{32}$″ centers. Size, 1¼″ x $1\frac{11}{16}$″ x $2\frac{21}{32}$″. Weight, 3 oz.

MR Series: Medium duty relay handles small motors, transmitters, etc. Silver contacts rated 8 amps., except SPST-NO-DB models, which rate 10 amps. Two $\frac{5}{32}$″ mtg. holes on 2⅝″ centers for 1- and 3-pole models; on 2¼″ centers for 2-pole. Size, $1\frac{11}{16}$″ x $2\frac{31}{32}$″ x $1\frac{11}{32}$″, MR3-MR5 series; 2″ x $2\frac{19}{32}$″ x $2\frac{3}{16}$″, MR11 series; 1¾″ x $2\frac{31}{32}$″ x $2\frac{3}{16}$″, MR14 series. Weight, 4 oz.

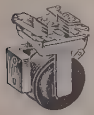
PR Series: Heavy-duty for industrial uses; long life and fast action. Heavy-duty screw terminals. Silver contacts rated 13 amps., PR1AY, PR3AY, PR5AY, PR7AY and PR11AY; 20 amps., PR3D; 15 amps., PR5D, PR7D and PR11D; 15 amps., DPDT with auxiliary SPDT contacts rated 5 amps. for PR11AL5. AC models except PR11AL5 carry U/L and CSA labels. Two $\frac{3}{16}$″ mtg. holes on 1⅞″ centers. Size, 2½″ x 2½″ x 3⅜″. Weight, 11 oz.

PS Series: Extra compact, long life relay ideal for mobile communication, appliances, etc. Solder terminals. Silver contacts rated 10 amps. Four 6-32 mtg. holes on ½″ x $1\frac{5}{16}$″ centers. Size, 1½″ x 1⅝″ x $1\frac{27}{32}$″. Weight, 4 oz.

SP Series: Medium duty, shock-proof relays with balanced armature; used for industrial, control, transmitter keying and similar fast, positive operations. Silver contacts rated 5 amps. Two 6-32 mtg. holes on $\frac{13}{16}$″ centers. Size, $1\frac{23}{32}$″ x 1⅝″ x $2\frac{7}{16}$″. Weight, 4 oz. (For enclosed SP, use AG Series listed on another page).

60 Cycle AC Relays			DC Relays			
	Net Each			Net Each		
P & B Number	6, 12, 24 or 115 v.	230 Volts	P & B Number	6, 12, or 24 Volts	110 Volts	Contacts
AB11AY	$5.05	$5.45	AB11D	$4.95	$5.45	DPDT
ABC11AY	6.10	6.50	ABC11D	6.00	6.50	DPDT
CA3A	3.05†	......	CA3D	2.75‡	......	SPST-NO-DB
MR2A	3.15*	......	....	......	......	SPST-NC
MR3A	3.65†	......	MR3D	3.35	......	SPST-NO-DB
MR5A	3.30	3.70	MR5D	3.05	3.55	SPDT
MR11A	4.60	5.00	MR11D	4.40	4.90	DPDT
MR14A	5.55	5.95	MR14D	5.20	5.70	3PDT
PR1AY	3.85*	......	....	......	......	SPST-NO
PR3AY	3.95	4.30	PR3D	3.95	4.55	SPST-NO-DB
PR5AY	4.15	4.55	PR5D	4.15	4.75	SPDT
PR7AY	4.65	5.05	PR7D	4.65	5.25	DPST
PR11AL5	7.75	8.15	....	......	......	DPDT
PR11AY	6.15	6.55	PR11D	6.15	6.75	DPDT
PS11A	7.60†	8.00	PS11D	6.55	6.95	DPDT
SP11A	6.50	..	SP11D	6.25	6.75	DPDT

*24 v. AC Model only. †No 12 v. AC model. ‡No 6 v. DC mod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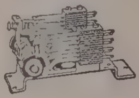
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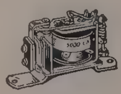
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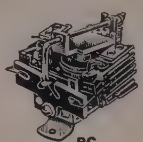

PC

SC

SL

SPECIAL PURPOSE RELAYS

(DESIGNED FOR SPECIFIC APPLICATIONS)

AF Series: 400 cycle relay used in governmental or industrial laboratories and aircraft applications. Silver contacts rated 5 amps. Two 6-32 mtg. holes on $\frac{7}{16}$″ centers. Size, 1⅜″ x $1\frac{9}{16}$″ x 2″. Weight, 2¾ oz.

AP Series: Ratchet, Impulse relay for reliability in on-off or reversing action for successive operations of the control lead. Positive ratchet at all speeds on impulses as short as 20 milliseconds. Intermittent operation only. Silver contacts rated 5 amps. Three $\frac{5}{32}$″ mtg. holes on 3⅜″ x ⅞″ triangular centers. Size, $2\frac{5}{16}$″ x 3¾″ x 2¼″. Weight, 7 oz.

FR Series: Photo flash relay has contacts and insulation to handle photo flash surge currents without sticking or pitting. Intermittent duty coils for high repetitive accuracy. Silver cadmium oxide contacts rated 8 amps. Two $\frac{5}{32}$″ mtg. holes on 2⅝″ centers. Size, $1\frac{11}{32}$″ x $2\frac{31}{32}$″ x $1\frac{11}{16}$″. Weight, 3½ oz.

PC Series: Alternate pulse relay; conventional armature relay operated by 30 millisecond pulses. Armature actuates a phenolic rocker to transfer contacts between alternate positions. For on-off or alternate positions. Gold-flashed silver cadmium oxide contacts rated 7.5 amps. Two $\frac{5}{32}$″ mtg. holes on 2⅝″ centers. Size, $2\frac{5}{64}$″ x $2\frac{1}{16}$″ x $2\frac{31}{32}$″. Weight, 6 oz.

SC Series: Microminiature permanent magnet relay has high shock and vibration resistance; conforms with standard crystal case relay dimensions and circuitry. Coil circuit polarized; positive terminal marked with red dot. Contacts rated 2 amps. Plug-in mount for printed circuit or receptacle, Model SC11D; shoulder bracket with two .104″ x .136″ holes on 1.062″ centers, Model SC11DA; mounting plate with four .125″ holes on 1.062″ x .281″ centers, Model SC11DB. Size, .795″ x .359″ x .875″ above chassis. Weight, ¾ oz.

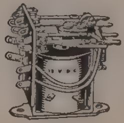
SL Series: Dual coil, microminiature, magnetic latching relay for low power, high shock and vibration resistance. Can be connected in series for polar operation. Requires connections to both coils or a reversing power source to both coils in series. Operates on 1 watt, 3 millisecond pulses to either coil. Mounting types and dimensions same as for SC series. Contacts rated 2 amps. Weight, ¾ oz.

P & B No.	Contacts	Coil Voltages	Net Ea
AF11A	DPDT	115 v., 400 cps AC	$ 8.2
AP11A	DPDT	6, 12, 24 or 115 v. AC	8.3
AP11A	DPDT	230 v. AC	8.7
AP17A	4PDT	6, 12, 24 or 115 v. AC	10.0
AP17A	4PDT	230 v. AC	10.4
AP11D	DPDT	6, 12 or 24 v. DC	8.3
AP11D	DPDT	110 v. DC	8.9
AP17D	4PDT	6, 12 or 24 v. DC	10.0
AP17D	4PDT	119 v. DC	10.6
FR5A	SPDT	6 v. AC	3.8
FR5D	SPDT	2 v. DC	3.8
PC11A	DPDT	6, 12, 24 or 115 v. AC	5.2
PC11A	DPDT	230 v. AC	5.6
PC17A	4PDT	6, 12, 24 or 115 v. AC	7.2
PC17A	4PDT	230 v. AC	7.6
PC11D	DPDT	6, 12 or 24 v. DC	5.1
PC11D	DPDT	110 v. DC	5.6
PC17D	4PDT	6, 12 or 24 v. DC	7.1
PC17D	4PDT	110 v. DC	7.6
SC11D	DPDT	6, 12 or 24 v. DC	15.7
SC11D	DPDT	36 v. DC	16.2
SC11DA	DPDT	6, 12 or 24 v. DC	15.7
SC11DA	DPDT	36 v. DC	16.2
SC11DB	DPDT	6, 12 or 24 v. DC	15.7
SC11DB	DPDT	36 v. DC	16.2
SC11DK	DPDT	6, 12 or 24 v. DC	15.7
SC11DK	DPDT	36 v. DC	16.2
SL11D	DPDT	6, 12 or 24 v. DC	17.2
SL11D	DPDT	36 v. DC	18.5
SL11DA	DPDT	6, 12 or 24 v. DC	17.2
SL11DA	DPDT	36 v. DC	18.5
SL11DB	DPDT	6, 12 or 24 v. DC	17.2
SL11DB	DPDT	36 v. DC	18.5
SL11DK	DPDT	6, 12 or 24 v. DC	17.2
SL11DK	DPDT	36 v. DC	18.5

RELAYS *All Types — All Sizes — for All Applications*

GB

KCP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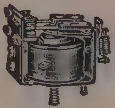
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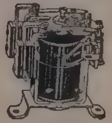

LM

PLATE CIRCUIT AND SENSITIVE RELAYS

(ALSO SEE TELEPHONE TYPE RELAYS)

se in photo-electric, counting, bridge circuits and all similar
d control applications for fast acting sensitive operation.

eries: Medium cost, high quality relay. Silver contacts rated s. Sensitivity 115 mw for SP; 275 mw for 4P models. Non-able pull-in. Mounts by 8-32 tapped core and locating half-. Size, 2$\frac{15}{32}$″ x 1$\frac{23}{32}$″ x 1$\frac{1}{16}$″. Weight, 5 oz.

Series: Low cost plate circuit relay in polystyrene case. Has ver contacts rated 2 amps. Sensitivity 125 mw for SP, 250 r DP and 375 mw for 3P models. Standard octal plug-in .: 8-pin for KCP5 and KCP11; 11-pin for KCP14. Size, x 1$\frac{13}{32}$″ x 2″. Weight, 3 oz.

eries: Multiple contact type with varied combinations and ielectric phenolic insulation for extra versatility. Silver con-rated 5 amps. Two 6-32 mtg. holes on 1$\frac{7}{16}$″ centers. Size, x 1$\frac{15}{16}$″ x 2$\frac{1}{32}$″. Weight, 5 oz.

eries: Antenna switching relay has glass base insulation for um RF loss to switch 300-ohm line. Fine silver contacts .5 amps. Single 6-32 mtg. stud. Size, 1$\frac{18}{32}$″ x 1$\frac{15}{16}$″ x 1$\frac{5}{8}$″. t, 1½ oz.

rles: Top performance, long life at low cost. Factory ad- coil for minimum current. Silver contacts rated 5 amps. $\frac{}{16}$″ mtg. holes on 2$\frac{7}{32}$″ centers. Size, 1¼″ x 2$\frac{21}{32}$″ x 1$\frac{3}{8}$″. t, 2 oz.

eries: Medium cost but high quality. Sensitivity 100 mw ', 200 mw for DP models. Tail spring adjusting screw for . Silver contacts rated 5 amps. Two 6-32 mtg. holes on centers. Size, 2$\frac{3}{16}$″ x 2$\frac{9}{16}$″ x 2¼″. Weight, 5 oz.

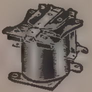
CURRENT RATED TYPES

P & B Number	Contact	Coil Resistance 2500 Ohms Pull-in Ma	2500 Ohms Net Each	5000 Ohms Pull-in Ma	5000 Ohms Net Each	10,000 Ohms Pull-in Ma	10,000 Ohms Net Each
GB5D	SPDT	6.8	**$3.30**	4.8	**$3.45**	3 4	**$3.90**
GB11D	DPDT	7.0	**4.60**	5.0	**4.70**	3.53	**5.25**
GB17D	4PDT	10.5	**5.50**	7.4	**5.65**	5.25	**6.10**
KCP5	SPDT	7.2	**5.60**	5.0	**5.70**	3.6	**6.10**
KCP11	DPDT	10.0	**6.00**	7.2	**6.10**	5.0	**6.50**
KCP14	3PDT	12.3	**7.40**	8.7	**7.50**	6.1	**7.90**
LB5	SPDT	9.0	**2.35**	6.3	**2.55**	4.5	**2.70**
LM5	SPDT	6 3	**3.70**	4.5	**3.90**	3.2	**4.20**
LM11	DPDT	9.0	**5.30**	6.3	**5.50**	4.5	**6.05**

VOLTAGE RATED TYPES

P & B Number	Contact	Coil Voltage	Net Each
KL5A	SPDT	6 or 115 v. AC	**$3.65**
KL11A	DPDT	6, 12, 24 or 115 v. AC	**4.55**
KL14A	3PDT	6, 24 or 115 v. AC	**5.10**
KL17A	4PDT	6, 12, 24 or 115 v. AC	**6.00**
KL5D	SPDT	6, 12 or 24 v. DC	**3.45**
KL11D	DPDT	6, 12 or 24 v. DC	**4.40**
KL11D	DPDT	110 v. DC	**4.90**
KL14D	3PDT	6, 12 or 24 v. DC	**4.90**
KL14D	3PDT	110 v. DC	**5.50**
KL17D	4PDT	6, 12 or 24 v. DC	**5.70**
KL17D	4PDT	110 v. DC	**6.30**
KT11A	DPDT	6 or 115 v. AC	**3.50**
KT11D	DPDT	6 or 12 v. DC	**3.50**

PW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SM

SM in Dust Cover

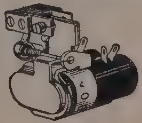
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PLATE CIRCUIT AND SENSITIVE RELAYS

eries: Precision, lightweight, hermetically sealed relay for t, missile applications. Withstand 10G vibration to 500 ated 2 amps. Sensitivity, 175 mw for voltage actuated, 40 r current actuated models. Standard 7-pin miniature tube mounting. Size, 1$\frac{11}{16}$″ x .765″ dia. Weight, 1 oz.

ries: Small, low cost, sensitive relay for radiosonde, light r and model uses. Withstands 10G vibration 5-55 cps and hock. Voltage and current actuated (60 mw sensitivity) s. Two 4-40 mtg. holes on ¾″ x ⅝″ diagonal centers. Bar lum contacts rated 2 amps. Size, $\frac{29}{32}$″ x 1$\frac{5}{32}$″ x 1″. Weight,

eries: Medium cost, lightweight relay for light contact load ations. Reed armature for extra long mechanical life. Her-ally sealed and dust covered models. Voltage and current ed (75 mw sensitivity) models. Silver-rhodium contacts 0.25 amp. Min 7-pin tube socket mount on sealed model; $\frac{}{32}$″ holes on $\frac{17}{32}$″ centers on dust cover model. Size, 1$\frac{11}{16}$″ x dia., sealed; 1$\frac{5}{8}$″ x $\frac{25}{32}$″ x ⅞″, dust covered. Weight, 1 oz.

ries: Ultra-sensitive, precision relay has dual series coils alanced armature on needle-point bearings for low energy s. May be used as a differential relay by connecting the two coils in separate circuits. Sensitivity 10 mw. Silver contacts rated 2 amps. Two 6-32 mtg. holes on $\frac{25}{32}$″ centers. Size, 1$\frac{5}{16}$″ x 1¾″ x 1$\frac{11}{16}$″. Weight, 3½ oz.

P & B Number	Con-tact	Coil Voltage or Current	Net Each
PW5DS	SPDT	6, 12 or 24 v. DC	**$10.25**
PW5LS	SPDT	2.8 ma at 5000 ohms	**10.60**
PW5LS	SPDT	2.0 ma at 10,000 ohms	**11.00**
RS5D	SPDT	6 v. DC	**2.50**
RS5D	SPDT	12 v. DC	**2.60**
RS5D	SPDT	5 ma at 2,500 ohms	**2.70**
RS5D	SPDT	3.5 ma at 5,000 ohms	**3.00**
RS5D	SPDT	2.5 ma at 10,000 ohms	**3.45**
SM5D	SPDT	6, 12 or 24 v. DC (enclosed)	**5.10**
SM5DS	SPDT	6, 12 or 24 v. DC (sealed)	**6.25**
SM5L	SPDT	3.9 ma at 5,000 ohms (enclosed)	**5.40**
SM5L	SPDT	2.7 ma at 10,000 ohms (enclosed)	**5.95**
SM5LS	SPDT	3.8 ma at 5,000 ohms (sealed)	**6.55**
SM5LS	SPDT	2.7 ma at 10,000 ohms (sealed)	**7.00**
SS5D	SPDT	1 ma at 10,000 ohms	**12.00**

SPECIAL INFORMATION AND ORDERING INSTRUCTIONS

OTE: Relays shown on these pages are standard types, in ock and ready for immediate shipment. From them, a type n be chosen to meet the needs for most electrical or elec-onic applications. All relay contacts are rated at 115 volts, cps, non-inductive load.

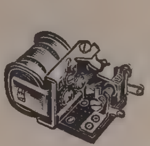
hen ordering, specify relay type and coil voltage or re-stance. Example: PR5AY, 115 volts AC, 60 cycles. Or: B5, 2500 ohms.

To operate 110 v. DC relays on 220 v. DC use a 5-watt wire-wound resistor of a value approximately the relay coil resistance. Place it in series with the relay coil.

CONTACT LEGEND: S-Single; D-Double; P-Pole; T-Throw; N-Normally; O-Open; C-Closed; B-Break; M-Make.

Prices and specifications subject to change without notice.

SIGMA SENSITIVE RELAYS



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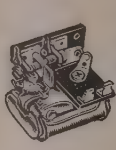

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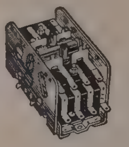

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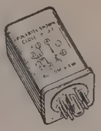

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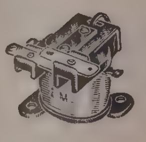

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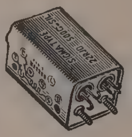

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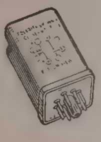

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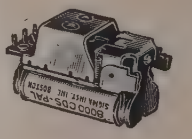

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PLATE CIRCUIT RELAY SERIES 4

General purpose, single-pole, double-throw relay with a balanced armature. Relay operates in any position. Spring tension and air gaps are adjustable with a screwdriver in open style of relay only. Relay 4F-8,000-S SIL widely used in model radio control. **Contact Ratings:** Silver, 2 amp, 28 v. DC/120 v. AC for 100,000 operations. **Sensitivity:** 20 and 50 mw. **Size:** 1½" x 1⅝" x 1 5/32" h. Weight, 2¼ oz. Available in other mountings and enclosures.

Sigma Type No.	Coil Ohms	Operate DC Ma	Net Each
4F-1,000-S SIL	1,000	4.5	**$6.05**
4F-2,500-S SIL	2,500	3.0	**6.05**
4F-5,000-S SIL	5,000	2.0	**6.35**
4F-8,000-S SIL	8,000	1.6	**6.60**

EXTRA-SENSITIVE PRECISION RELAY SERIES 5

Precise and rugged AC and DC general purpose relay. Operation on AC is accomplished by means of built-in rectifiers. Balanced armature, single-pole, double-throw unit. Wide range of sensitivity adjustments. **Contact Ratings:** Varies up to 3 amp, at 28 v. DC/120 v. AC for 100,000 operations, depending on contact material and adjustment. **Sensitivity:** 1.0 mw to 2.0 watts. **Size:** 1¾" x 1 5/16" x 1 11/16" h. (including terminals). Weight, 4¼ oz. Available in other mountings and enclosures.

Sigma Type No.	Coil Ohms	Operate DC Ma	Net Each
5F-1,000-S SIL	1,000	2.3	**$8.25**
5F-2,500-S SIL	2,500	1.4	**8.25**
5F-5,000-S SIL	5,000	1.0	**8.80**
5F-10,000-S SIL	10,000	0.7	**9.65**

POLARIZED MULTIPOLE RELAY SERIES 6

Polarized relay with up to four-pole, double-throw in either single or dual coil arrangements. Sensitivity is low enough for low-power electronic circuits. Operation is fast enough for follow-up systems. **Contact Ratings:** Silver, 2 and 5 amp, at 28 v. DC/120 v. AC. "X"—3-position center stable (up to 4 Form K); "Y"—Magnetic bias (up to 4 Form C); "Z"—magnetic latching (up to 4 Form C). Available hermetically sealed or unenclosed. **Size:** 1⅞" x 3 7/16" x 1⅞" h. Weight, 10 oz.

SINGLE COIL

Sigma Type No.	Coil Ohms	Operate DC Ma	Net Each
6FX2A2A-5,000-G SIL	5,000	1.9	**$29.90**
6FX2A2A-10,000-G SIL	10,000	1.5	**30.50**

DUAL COIL

Sigma Type No.	Coil Ohms	Operate DC Ma	Net Each
6FX2A2A-2,500-GD SIL	2,500/2,500	4.2	**$30.75**
6FX2A2A-5,000-GD SIL	5,000/5,000	3.0	**31.60**

SPDT POLAR RELAY SERIES 7

Single-pole, double-throw, polar relay available in single or du coil, "X", "Y", or "Z" switching forms. Hermetically sealed octal plug-in type mounting as illustrated. Dust covered and stu mounted octal plug-in types available. **Contact Ratings:** Silv or palladium contacts, .5 to 2 amp. **Sensitivity:** 2.5 to 13 mw **Size:** 1⅝" x 1⅝" x 4 9/16" h. Weight, 7¼ oz. (max.).

Sigma Type No.	Coil Ohms	Operate DC Ma	Contacts	Net Each
7JOZ-150-GD SIL	150*	2.7-3.8†	SPDT	**$24.1**
7KOY-2,500-G SIL	2,500	1.3	SPDT	**22.55**
7JOX-3,500-SD SIL	3,500*	1.3†	SPDT	**29.25**
7JOY-10,000-S SIL	10,000	0.50	SPDT	**23.40**

*Each coil. †Either way, either coil.

SMALL LOW-COST RELAY SERIES 11

Single-pole, double-throw AC and DC relay available in unenclosed models only, in four mounting styles. **Contact Ratings:** 1 amp, "G" and "ACS" adjustments; 5 amp, "W" adjustmen at 28 v. DC/120 v. AC. **Sensitivity:** 50 mw in "G" adjustmen 200 mw in "W" adjustment, DC version. 0.3 VA in "ACS" adjus ment, AC version. **Mounting Types:** 11F, 2 tapped holes, unin lated; 11F2, insulated base; 11F3, insulated base interchangea with other manufacturers' relays; 11FP, shoulder lug mount fo printed circuitry. **Size:** 1 5/16" x 1 5/16" x 1" h. Weight, 1 oz.

AC TYPES

Sigma Type No.	Coil Volts	Operating Voltage	Contacts	Net Each
11FZ-40-ACS SIL	6	4.9	SPDT	**$2.5**
11FZ-150-ACS SIL	12	9.5	SPDT	**2.5**
11FZ-550-ACS SIL	24	18	SPDT	**2.5**
11FZ-9,000-ACS SIL	120	75	SPDT	**2.9**

DC TYPES

Sigma Type No.	Coil Ohms	Operate DC Ma	Contacts	Net Each
11F-1,000-G SIL	1,000	7.0	SPDT	**$1.7**
11F-2,300-G SIL	2,300	4.6	SPDT	**1.7**
11F-6,000-G SIL	6,000	2.9	SPDT	**1.9**
11F-9,000-G SIL	9,000	2.4	SPDT	**2.1**

MISSILE TYPE RELAY SERIES 22

Miniature DC relay used in special commercial and military app cations. **Contact Ratings:** Silver, 2 amp; palladium and gold, amp. All at 28 v. DC/120 v. AC. Silver alloy contact rated amp, at 28 v. DC/120 v. AC. **Sensitivity:** "G" adjustment mw SPDT, and 40 mw DPDT; "HG" adjustment same as "W" adjustment 40 mw and 80 mw. Both adjustments vibra proof: "HG", 10 "g" to 500 cps; "W", 15 "g" to 500 cps; 5 to 2,000 cps. **Size:** 1" x 1" x 1¾" h. Weight, 3 oz.

Sigma Type No.	Coil Ohms	Operate DC Ma	Contacts	Net Each
22RJC-1,000-G SIL	1,000	4.5	SPDT	**$13.0**
22RJC-2,500-G SIL	2,500	2.8	SPDT	**13.5**
22RJC-5,000-G SIL	5,000	2.0	SPDT	**14.0**
22RJC-8,000-G SIL	8,000	1.6	SPDT	**14.5**
22RJCC-1,000-G SIL	1,000	6.3	DPDT	**14.5**
22RJCC-2,500-G SIL	2,500	4.0	DPDT	**15.0**
22RJCC-5,000-G SIL	5,000	2.8	DPDT	**15.5**
22RJCC-8,000-G SIL	8,000	2.3	DPDT	**16.0**

DOUBLE-POLE 3-POSITION POLAR RELAY SERIES 23

For single or double-pole, 3-position switching ("X"), with sing or dual coil. Magnetic circuit restores armature to mid-positio between fixed contacts, improving mechanical and thermal st bility. **Contact Ratings:** Silver, 2 amp, at 28 v. DC/120 v. A for 100,000 operations. **Sensitivity:** Varies from 6-24 mw. H metically sealed only. Also available Form "Y" magnetic b **Size:** 1⅝" x 1⅝" x 2 9/16" h. Weight, 8⅝ oz.

SINGLE COIL

Sigma Type No.	Coil Ohms	Operate DC Ma	Contacts	Net Each
23JOXC-4,000-G SIL	4,000	1.2	SPDT	**$53.4**
23JOXCC-6,000-G SIL	6,000	1.4	DPDT	**54.2**

DUAL COIL

Sigma Type No.	Coil Ohms	Operate DC Ma	Contacts	Net Each
23JOXC-2,500-GD SIL	2,500/2,500	2.2	SPDT	**$55.1**
23JMXCC-4,200-GD SIL	4,200/4,200	2.3	DPDT	**59.5**

RADIO CONTROLLED MODEL RELAY SERIES 26

Single-pole, double-throw, balanced armature relay with adjus ments from 4 mw to 20 mw. Unenclosed 8,000 ohms model is ex rugged, designed for R/C models; uses less plate current for lo tube life. **Contact Ratings:** 0.5 amp, at 28 v. DC/120 v. A silver (SIL), gold alloy (GSP) and palladium (PAL). Availa in "S", "G", and "W" adjustments in hermetically sealed unenclosed models. **Size:** 1" x 1⅞" x 1 1/16" h. Weight, 2 oz.

Sigma Type No.	Coil Ohms	Operate DC Ma	Contacts	Net Each
26F-1,000-S SIL	1,000	2.3	SPDT	**$ 7.**
26F-8,000-CDS SIL	8,000	0.7	SPDT	**9.**
26F-12,000-G SIL	12,000	0.9	SPDT	**10.**

SIGMA SENSITIVE RELAYS

MAGNETIC LATCHING RELAY SERIES 32

ture, magnetic latching type (Sigma Form "Z") double-ble-throw relay. Single or dual coil. **Contact Ratings:** amp; gold alloy for dry circuits, .5 amp. **Sensitivity:** il, 50 mw; dual coil, 100 mw. Hermetically sealed, flange, ate mounting with plug-in or J-hook terminal connectors. ds vibration of 30 "g" to 5,000 cps. Shock of 100 "g" cause damage. **Size:** .800″ x .400″ x .900″ h. Weight,

igma pe No.	Coil Ohms	Operate DC Ma	Contacts	Net Each
00-G SIL	200	15.5	DPDT	$23.00
325-GD SIL	325†	17.5*	DPDT	26.00
00-G SIL	800	8.0	DPDT	23.50
100-G SIL	3,100	4.0	DPDT	23.50

il. *Either way, either coil.

DPDT POLAR RELAY SERIES 33

ture magnetic bias relay (Sigma Form "Y"). Relay is ole, double-throw type hermetically sealed. **Contact Rat-**ver, 2 amp; gold alloy contacts for dry circuits, .5 amp. **ty:** Single coil, 200 mw. Mounting styles, vibration and ings, same as Series 32 relay. **Size:** .800″ x .400″ x .900″ h. 18 grams.

gma e No.	Coil Ohms	Operate DC Ma	Contacts	Net Each
G SIL	50	63	DPDT	$23.00
00-G SIL	200	32	DPDT	23.00
00-G SIL	800	16	DPDT	23.50
100-G SIL	3,100	8	DPDT	23.50

LE-POLE AC AND DC RELAY SERIES 41

urpose, highly sensitive, rugged relay that is quiet enough electric blanket controls. **Contact Ratings:** 0.5 to 5.0 28 v. DC/120 v. AC. Tungsten contacts, 1.0 amp, at 28 20 v. AC. **Sensitivity:** Down to 0.06 volt-ampere, AC by pole shading. "K" adjustment adapted for high-ing, free of contact bounce when operated SPST, nor-en. **Size:** 2¼″ x 1¼″ x 1⁵⁄₁₆″ h. Weight, 2½ oz. Other s and enclosures are available.

AC TYPES

igma pe No.	Operating Voltage	Nominal Voltage	Contact Rating	Net Each
ACG SIL	4.0	6	5 amp	$3.50
ACS SIL	5.0	6	2 amp	4.00
-ACG SIL	18	24	5 amp	3.50
-ACS SIL	19	24	2 amp	4.00
00-ACG SIL	90	115	5 amp	3.65
000-ACS SIL	85	115	2 amp	4.45
000-ACG SIL	140	230	5 amp	4.15

DC TYPES

gma e No.	Coil Ohms	Operate DC Ma	Contact Rating	Net Each
SIL	5	90	2 amp	$3.85
SIL	50	30	2 amp	3.85
S SIL	200	15	2 amp	3.85
0-S SIL	1,000	6.5	2 amp	3.85
0-S SIL	5,000	3.0	2 amp	4.00
00-S SIL	10,000	2.0	2 amp	4.25

LE-POLE AC AND DC RELAY SERIES 42

urpose, double-pole version of Series 41. Illustrated with ust-cover. Operates under 0.2 watt DC and under 0.5 ere AC. **Contact Ratings:** Silver, 2 or 5 amp at 28 v. DC/ C. "S" or "ACS" adjustments, 2 amp; "G" or "ACG" nts, 5 amp. **Size:** 1¹¹⁄₃₂″ x 1¹¹⁄₃₂″ x 2¹⁄₁₆″ h. Weight, 3¼ oz.

AC TYPES

Sigma ype No.	Operating Voltage	Nominal Voltage	Contact Rating	Net Each
-ACG SIL	4.0	6	5 amp	$6.20
5-ACS SIL	5.0	6	2 amp	7.15
00-ACG SIL	19.0	24	5 amp	6.20
40-ACS SIL	19.0	24	2 amp	7.15
,000-ACG SIL	90.0	120	5 amp	6.20
,000-ACS SIL	90.0	120	2 amp	7.35

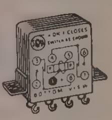
DC TYPES

igma pe No.	Coil Ohms	Operate DC Ma	Contact Rating	Net Each
G SIL	5	200	5 amp	$6.20
-G SIL	50	65	5 amp	6.20
0-G SIL	200	32	5 amp	6.20
000-G SIL	1,000	14	5 amp	6.20
000-G SIL	5,000	6.5	5 amp	6.40
,000-G SIL	10,000	4.5	5 amp	6.60

ENSITIVE POWER RELAY SERIES 51

le, double-break, normally-closed, DC relay for control from 10 amp to 1 kw. Used in commercial photoelectric t control. Rated for 1,000 watt incandescent 120 v. AC h inrush currents of about 100 amp. Double-break con-struction eliminates faulty circuit operation due to stick-cts. Unenclosed style (FB) only. Silver contacts. **Size:** ⅜″ x 1⁵⁄₁₆″ h. Weight, 3¼ oz.

ype No. 51FB-5,000-G SIL—Operates at 4.5 Net Each.. **$10²⁰**



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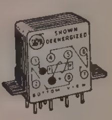

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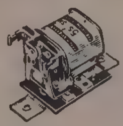

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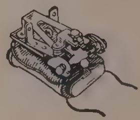

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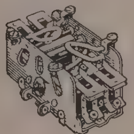

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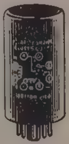

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CdS1

LATCHING POWER RELAY SERIES 61

Heavy duty, Form "Z" two-position, single or dual coil modification of Series 6. For switching heavy loads with minimum of coil power. Load is switched by momentary signal of appropriate polarity. Remains magnetically latched until signal of opposite polarity is received. 2A2B only. **Contact Rating:** Silver-cadmium, 20 amp at 28 v. DC/120 v. AC. Also available: Form "Y" magnetic bias. **Size:** 3½″ x 2³⁄₁₆″ x 2³⁄₃₂″ h. Weight, 10 oz.

Sigma Type No. 61FZ2A2B-10,000-G SC—Single coil; 50 v. DC to operate each polarity. Net Each.......... **$23⁷⁵**

Sigma Type No. 61FZ2A2B-10,000-GD SC—Dual coil; 72 v. DC to operate each polarity. Net Each.......... **$26²⁵**

HIGH SPEED POLAR SWITCHING RELAY SERIES 72

Relay for high-speed switching and pulse repeating applications. Capable of switching 500 pulses/second with virtual elimination of contact bounce. High immunity to extremes of temperature, vibration and shock. Form "Z", side-stable. Maintenance and adjustment manual available. Removable nylon cover. **Size:** 1⁷⁄₁₆″ dia. x 2⅝″ h. Weight, 3⅓ oz. (max.).

Sigma Type No.	Operate DC Ma*	Operate DC Ma†	Source Voltage†	Net Each
72AOZ-160-TS TCP	1.4	15	50 v. DC	$33.00
72AOZ-160-TG TCP	3.6	6.0	50 v. DC	33.00

*Either way, either coil. †Recommended drive for max. speed.

MINIATURE POLAR RELAY SERIES 73

Miniature, hermetically sealed units in "X", "Y" and "Z" switching forms. Relay is single-pole, double-throw. **Contact Ratings:** Silver, 1.5 amp. **Sensitivity:** From 6-70 mw, single or dual coil. Vibration rating, 10 "g" to 500 cps. Shock of 100 "g" will not cause damage. Flange mounting, 7 or 9-pin plug-in or solder terminal connections available. **Size:** .760″ dia. x 1¹¹⁄₁₆″ h. Weight, 1.6 oz. (max.).

Sigma Type No.	Coil Ohms	Operate DC Ma	Contacts	Net Each
73JNZ-500-GD SIL	500*	4.8†	SPDT	$23.40
73JSZ-2,500-G SIL	2,500	1.5	SPDT	22.80
73JSZ-4,000-G SIL	4,000	1.2	SPDT	22.80

*Each coil. †Either way, either coil.

CdS PHOTORELAY MODEL NO. 1

A miniature, tubeless photorelay with a cadmium sulfide photocell. For furnace flame-out controls, pinball machines, elevators, conveyors, etc. Dust-proof can; 5-pin plug-in base; operates at 5 foot-candles or less. Releases at 0.1 foot-candle or more. Two operations/second guaranteed minimum. 120 v. AC, 50/60 cps at a temperature range of −40° C to 75° C. **Size:** 1½″ x 1½″ x 1⅞″ h. Weight, 3 oz.

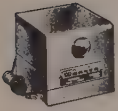
Sigma CdS Photorelay Model No. 1—Net Each....... **$15⁰⁰**

Model No. 2 for slowly changing light source also available.

THERE IS A SIGMA RELAY TO SUIT YOUR REQUIREMENTS. WRITE US FOR SPECIFICATIONS AND PRICES ON NEW OR UNLISTED RELAYS.

ELECTRONIC DEVICES WORNER "Fotolectric" Equipmen

FOTOLECTRIC BURGLAR ALARM SYSTEMS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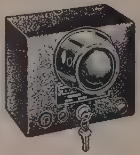
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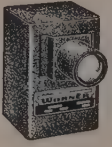
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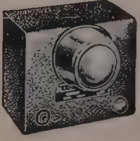
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F

TWO-UNIT WATCHMAN SYSTEM

A low priced system consisting of an Exciter Lamp Unit (**A**) and a Relay Unit (**B**) with the photo-cell. Relay Unit has toggle switch for continuous alarm or for alarm only when beam is broken. Sensitivity control knob. Range to 35′ with infra-red lamp. Extraneous light rejector shield permits full daytime operation if 90% of light reaching photo-cell is from exciter lamp. 110-120 v. 60-cycle AC. Welded steel cases 5″ x 5″ x 5½″ deep. Hammerloid finish.

Model 4000 System—Net Each.................... **$55.80**

5000 SERIES LONGER RANGE SYSTEMS

Consists of an Exciter Lamp Unit (**D**) and a Relay Unit (**C**) with photocell. For interior use where single beam is ample protection. Not for use with foil systems or other types of protective devices. Can be used with mirror. Relay Unit has On-Off knob, phone jack for connecting meter to test current, a sensitivity control, and a lock controlling the warning system . . . alarm can be turned off or trespass trap reset only by key. Distances are for infrared light. Relay 7″ x 6¼″ x 4½″. Exciter 6¼″ x 7″ x 4½″. For 110-120 v. AC.

Model 5100 System—100′ maximum range.
Net Each.................................... **$80.85**

Model 5150 System—150′ maximum range. Net Each. .**$93.00**

EXCITER LAMP AND PHOTO-CELL RECEIVER UNITS

For Use With Models 63, 63-A and 63-B

Model 33-10

Model 23

Model 31

Model 21

The Exciter Lamp Unit is designed to protect the light beam and the Photo-Cell Receiver is designed to pick up the beam and convert its light into electrical energy through the Electronically Operated Relay unit.

Model 33-10 Exciter Lamp is "standard" for general applications. Its light beam covers a distance from a few inches to 10 feet from Lamp to Photo-Cell. Heavy cast iron unit with ½-inch conduit fittings. Gray finish.

Model 23 Photo-Cell Receiver is engineered for use with Model 33 Exciter Lamp and has all the same case specifications.

Above set can be made waterproof at slight additional cost.

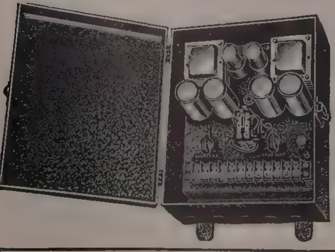
Model 31 Exciter Lamp is "standard" where a lighter weight case is practical. Its light beam covers a distance from one foot to 25 feet from Lamp to Photo-Cell. Case is 18 gauge steel, gray wrinkle finish. Has ½-inch knockout.

Model 21 Photo-Cell Receiver is engineered for use with Model 31 Exciter Lamp and has the same case specifications.

Model	Description	Size, Inches	Net Each
33-10*	Exciter Lamp	4¼ x 2¾ x 2¾	$17.82
23	Photo-Cell Receiver	4¼ x 2¾ x 2¾	20.88
31	Exciter Lamp	6⅝ x 2 x 1¾	13.14
21	Photo-Cell Receiver	6⅝ x 2 x 1¾	17.43

*Available in longer and crossover beams. Write for information.

MODEL 63 ELECTRONICALLY OPERATED RELAYS



Use with Photo-Cell and Exciter Lamps above. Operate also from daylight, artificial lights or radiant energy. Highest quality unit, enjoys wide preference. Meets exacting requirements and replaces need of costly gear. Details on request.

Model	Electronically Operated Relays	Net Each
63	Described above	$111.00
63-A	Combines Model 63 and Time Delay Circuit, giving delay from 0 to 45 seconds	121.80
63-B	Same as Model 63, with additional amplification to operate on less active light change	129.69

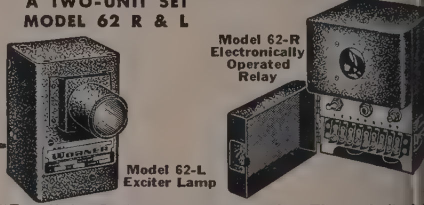
7000 AND 9000 SERIES SYSTEMS

Each system consists of an Exciter Lamp Unit (**D**) and a Re Unit (**E**) with photoelectric cell. **7000 Series** operates with rem control from outside watch service, police or other local al system; may be added to existing system and controlled fr existing control panel. May be used with foil systems, traps, e **9000 Series** requires use of Master Control Panel (**F**) in additio the Exciter and Relay Units. May be used for photoelectric de tion only, or may include trap units, foil systems, etc. **Sizes:** and 150′ Units—Exciters 6¼″ x 7″ x 4½″, Relays 7″ x 6¼″ x 4 250′ and 500′ units all are 5¾″ x 7″ x 15¾″. Units for 100′ and in welded steel cases with gray wrinkle finish; 250′ and 500′ U in welded steel waterproof cases, brown wrinkle finish. All U available for either 110-120 v. or 24 v. 60 cycle AC.

Model	Range	Net Each	Model	Range	Net Each
7100	100′	$ 82.50	9100	100′	$ 82.5
7150	150′	95.88	9150	150′	95.8
7250	250′	118.50	9250	250′	118.5
7500	500′	146.25	9500	500′	146.2

Model 9000-N—Master Control Panel. Net Each......**$61.**

A TWO-UNIT SET
MODEL 62 R & L



"Two-Unit" Set has Exciter Lamp and an Electronically Op ated Relay that includes the Photo-Cell Receiver, Relay and o electrical controls. Efficient for distances from a few inches 75 feet or where Relay is not required to operate in excess o times a minute. Efficient on simple applications such as count sorting large objects, limit switches, start and stop operat

Model 62-R & L—"Two-Unit" Set—Per Set......Net **$82.**
Model 62-R—Electronically Operated Relay only. Net **69.**
Model 62-L—Exciter Lamp only..................Net **24.**

FOTOLECTRIC ANNOUNCER SET

Unit, Mirror and Chime

Projects a "beam of light" across the entrance, room, or building. Breaking of light beam by person entering activates the chime to automatically announce the entrant. Unit combines Exciter Lamp and Photo-Cell in gray hammerloid case, 8¼″ x 6½″ x 3¾″. For indoor use on 110-120 v., 50-60 cps, AC.

Model 61—Fotolectric Announcer with chime only.
Net Each..... **$36.00**

FOTOLECTRIC KITS FOR EXPERIMENTAL WO

MODEL 69

Model 69 Photo-Cell Kit. Will operate on any source of light that will provide a change of light density to the photo-cell to actuate the relay. Relay is rated 5 amperes, 110 v. AC, non-inductive. Not intended for industrial applications. Gray hammerloid steel case 2½″ x 3½″ x 4″.

MODEL 39

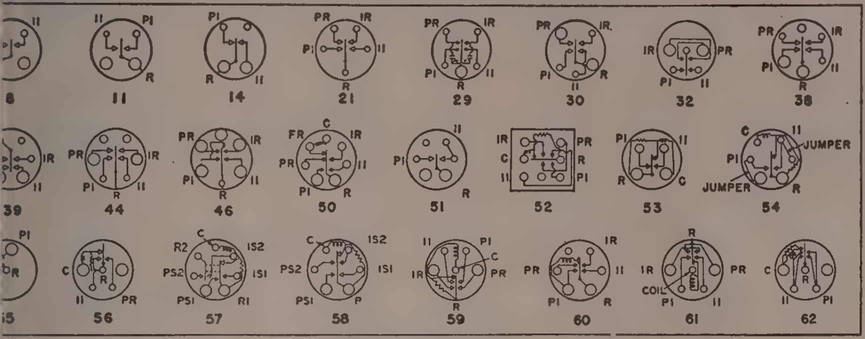
Model 69—Net Each.............................. **$14**

Model 39 Exciter Lamp Kit—Designed for use with Mod Photo-Cell Kit. Equipped with a special 21 candlepower bul well designed optical system to project a diffused light bea feet. Packed unassembled with cord, plug and diagra instructions. Gray hammerloid steel case 2¼″ x 4″ x 4½″.

Model 39—Net Each.............................. **$9**

P. R. MALLORY & CO Inc.

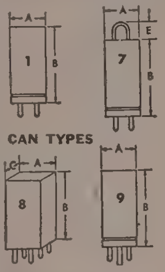
ALLORY Vibrators, Buffers



BASE DIAGRAMS

C = Coil FR = Frame II = Inertia Interrupter IR = Inertia Rectifier IS = Inertia Spring
PI = Pull Interrupter PR = Pull Rectifier PS = Pull Spring R = Reed

Mallory Vibrators are assembled from carefully matched materials built to extremely close tolerances, assuring perfect balance and precise operation. Crude rubber insulation and heavy cans effectively deaden sound and vibration. Every Mallory vibrator is tested for output, starting voltage and wave form. If Mallory type number is not known refer to diagram at right or write for **VIBRATOR GUIDE, 15c** FREE when request is included with order for Mallory Vibrators.



COMMON AUTO REPLACEMENT TYPES

Eight units cover 90% of your replacement requirements for auto radios. Famous **"Gold Label"** models indicated by *.

Mallory No.	Volts	Type	Base Diag.	Can Type	Size, In. A x B x C	Net Each
*G1601/G859	12	Int.	8	1	1½ x 2⅝	$2.82
*G1602/G883	12	Int.	55	9	1½ x 2⅝	2.82
W1601/W859	4	Int.	8	1	1½ x 2⅝	2.94
509P	6	Int.	8	1	1½ x 2⅞	4.62
716	6	Syn.	30	7	1 15/16 x 3½	4.62
*1601/859	6	Int.	8	1	1½ x 2⅝	2.82
903M	6	Int.	8	1	1½ x 2⅞	2.16
1501/4501	6	Int.	53	1	1½ x 2⅞	3.81

COMPLETE VIBRATOR SPECIFICATIONS

Mallory No.	†	Volts	Type	Base Diag.	Can Type	Size, Inches A x B x C	Net Each
F294	1	32	Int.	8	1	1½x2⅞	$4.29
F826S/F826C	1, 2	32	Int.	8	1	1½x2⅞	4.62
G1803C/G567C	...	12	Int.	38	1	1½x3	5.97
G1801S/G725C	1, 2	12	Syn.	32	1	1½x2 15/16	5.97
G1802S/G749C	1, 2	12	Syn.	21	1	1½x2 15/16	5.97
G1603S/G826C	1, 2	12	Int.	8	1	1½x2 15/16	4.62
G1501/G4501‡	1	12	Int.	53	1	1½x2⅞	4.14
G1808/G4546	...	12	Syn.	38	1	1½x2⅞	5.13
G1807/G4548‡	...	12	Syn.	44	1	1½x2⅞	5.13
G1801/G4549‡	...	12	Syn.	32	1	1½x2⅞	5.13
M1501/M4501	...	24	Int.	53	1	1½x2⅞	4.14
T4002	...	2	Syn.	52	8	1½x2⅛x1½	6.42
T4003	...	2	Syn.	50	1	1 5/16x2⅛	5.88
W1802/W759	3	4	Syn.	21	1	1½x2⅞	4.95
W1601/W859	3	4	Int.	8	1	1½x2⅝	2.94
1802/245	1	6	Syn.	21	1	1½x2⅞	4.62
247	...	6	Syn.	46	1	1½x3¼	4.62
273C	...	6	Syn.	29	1	2x4½	5.49
294	...	6	Int.	8	1	1½x2⅞	2.94
298	...	6	Int.	51	1	1½x2⅞	3.81
509P	...	6	Int.	8	1	1½x2⅞	2.49
1806/576	...	6	Syn.	61	1	1½x2⅞	4.62
716	...	6	Syn.	30	7	1 15/16x3½	4.62
1801S/725C	1, 2	6	Syn.	32	1	1½x2 15/16	5.13
1801/742	...	6	Syn.	32	1	1½x2⅞	4.62
743	...	6	Syn.	38	1	1¼x2⅞	4.62
748	...	6	Syn.	44	1	1½x2⅞	4.62
825S/825C	1, 2	6	Int.	8	1	1½x2⅞	4.14
1603S/826C	1, 2	6	Int.	8	1	1½x2 15/16	3.81
854	...	6	Int.	11	1	1½x2⅞	2.94
870	...	6	Int.	14	1	1½x2⅞	2.94
903M	...	6	Int.	8	1	1½x2⅞	2.16
954	...	6	Syn.	39	1	1½x3 5/16	4.62
1604/1100	...	6	Int.	8	1	1 5/16x2 3/16	2.94
1701‡	...	6/12	Int.	57	1	1½x3	5.76
1751‡	...	6	Int.	58	1	1½x3	5.88
1752‡	...	6/12	Int.	62	1	1½x3	5.82
1852‡	...	6	Syn.	59	1	1½x2⅞	5.82
1501/4501‡	1	6	Int.	53	1	1½x2⅞	3.81
1512/4512‡	...	6	Int.	54	1	1½x2⅞	4.14
1513/4513‡	...	6/12	Int.	56	1	1½x2⅞	4.14
1514/4514‡	...	6	Int.	53	1	1½x2⅞	4.14
1808/4546‡	...	6	Syn.	38	1	1½x2⅞	4.62
1807/4548‡	...	6	Syn.	44	1	1½x2⅞	4.62
1801/4549‡	...	6	Syn.	32	1	1½x2⅞	4.62
GC7	4	Ground Cup		.....	....	.27
AR-1	5	Adapter		.....	....	.90
VP-1	...	Vibrator Puller		.....	....	1.65

†—**1:** For new equipment design only, other types for replacement purposes only. **2:** Hermetically sealed. **3:** Designed for photoflash applications. **4:** A grounding cup for 1½" dia. vibrators which makes low RF ground between vibrator can and power supply. **5:** Five special sockets for Practical Vibrator tester. Supplied as complete kit only. **Int.**—Interrupter. **Syn.**—Synchronous. ‡For Mobile communications and heavy duty uses.

COMMUNICATION TYPE VIBRATORS

d for mobile communications and other heavy duty uses. red to the finest standards and will give long, trouble-free when used as recommended.

lory o.	Volts	Type	Base Diag.	Size, Inches	Net Each
G4501	12	Int.	53	1½ x 2⅞	$4.14
G4548	12	Syn.	44	1½ x 2⅞	5.13
G4549	12	Syn.	32	1½ x 2⅞	5.13
	6	Int.	57	1½ x 3	5.76
	6	Int.	58	1½ x 3	5.88
	6/12	Int.	62	1½ x 3	5.82
	6	Syn.	59	1½ x 2⅞	5.82
01	6	Int.	53	1½ x 2⅞	3.81
12	6	Int.	54	1½ x 2⅞	4.14
13	6/12	Int.	56	1½ x 2⅞	4.14
14	6	Int.	53	1½ x 2⅞	4.14
46	6	Syn.	38	1½ x 2⅞	4.62
48	6	Syn.	44	1½ x 2⅞	4.62
49	6	Syn.	32	1½ x 2⅞	4.62

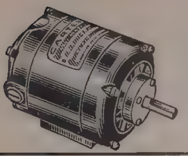
BUFFER CAPACITORS

paper capacitors have case molded from high grade, min- d bakelite; sealed against moisture and mechanical shock y resin. Double tinned copperweld wire leads. Tolerance, Working voltage, 1600 v. DC; test 3200 v. DC.

llory lo.	Capacity µf	Size, Inches Dia. x Length	Net Each
-1621	.001	⅜ x 1¼	39c
-1622	.002	⅜ x 1¼	39c
-16225	.0025	7/16 x 1¼	39c
-1623	.003	7/16 x 1¼	33c
-16233	.0033	7/16 x 1¼	33c
-1624	.004	7/16 x 1¼	33c
-16247	.0047	½ x 1½	33c
-1625	.005	½ x 1½	33c
-16256	.0056	½ x 1½	39c
-1626	.006	½ x 1½	33c
-16268	.0068	½ x 1½	39c
-1627	.007	½ x 1½	33c
-16275	.0075	½ x 1½	33c
-1628	.008	½ x 1½	36c
-16282	.0082	½ x 1½	39c
-1611	.01	½ x 1½	36c
-161125	.0125	⅝ x 1⅞	42c
-1612	.02	⅝ x 1⅞	42c
-1613	.03	⅝ x 1⅞	42c
-1614	.04	¾ x 2¼	42c
-1615	.05	¾ x 2¼	42c
-1616	.06	¾ x 2¼	42c

FRACTIONAL HP MOTORS
GENEMOTORS, DC-AC CONVERTERS
FREQUENCY CHANGERS

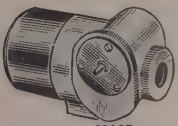
CARTER *Classic* FHP MOTORS



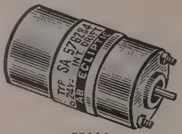
Universal AC/DC type. Totally new design—not a composite of existing parts. Engineered to top standards in every detail, employing advanced materials and manufacturing techniques. Super precision sealed ball bearings, no lubrication required. Larger Line-O-Life Brushes for longer service. Models listed are for 115 v. AC/DC input, other inputs 12 v. to 220 v. available. Size: 4½" x 3⁵⁄₁₆" x 3⅜" high. Weight, 3¾ lbs.

Carter No.	Hp.	RPM	Net Each
CUA3635A	1/35	3,600	$27.97
CUA5025A	1/25	5,000	27.97
CUA7520A	1/20	7,500	27.97
CUA1015A	1/15	10,000	27.97
CUA3620A	1/20	3,600	28.46
CUA5018A	1/18	5,000	28.46
CUA7512A	1/12	7,500	28.46
CUA1010A	1/10	10,000	28.46

CARTER-ECLIPTIC MOTORS



M107

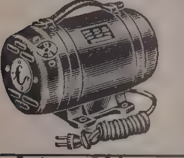


M114

New line of very small motors offers precision quality at popular prices. Universal, gear motors, Tachometer-Generators, PM and Governor controlled models available in 8 standard frame sizes. Finest craftsmanship and design. Prompt delivery. Modifications to order a specialty. Only popular models listed here. Write for catalog on other types up to ⅛ hp.

Carter No.	Type	Input	Hp.	Duty	RPM	Net Each
M105B	Universal	12 AC/DC	1/150	Con.	10,000	$27.75
M105E	Universal	24 AC/DC	1/150	Con.	10,000	27.75
M107B	Gearmotor	12 AC/DC	1/250	Int.	100 to 300	36.56
M107E	Gearmotor	24 AC/DC	1/250	Int.		36.56
M114B	PM Revers.	12 DC	1/150	Con.	10,000	35.81
M114W	PM Revers.	48 DC	1/150	Con.	10,000	35.81
M120E	PM Gov.	24 DC	1/150	Con.	8,000	50.25
M120W	PM Gov.	48 DC	1/150	Con.	8,000	50.25
C0843	DC Gear Reversible	12 DC	50 oz. in.	Con.	10 to 100	47.62

CUSTOM CONVERTERS



Dependable rotary power for operating office business machines, professional tape recorders, railroad, mobile and marine radio and radar equipment. Finest construction. Sealed ball bearings require no lubrication. Long life, continuous duty, high efficiency on all models. Only popular models listed here. For 50-cycle output, add **$3.75** to net prices. All models 100% power factor. Size: 300 watts, 11⅝" x 6¾" x 7¼" high; 500 watts, 12⅝" long; 750 watts, 13⅞" long.

Carter Number	DC Input Volts	DC Input Amps	Watts at 115 v. AC, 60 cps.	Net Each
BR1021CP*	12	29	210	$195.00
B1030CP	12	45	300	142.50
E1030CP	24	22	300	142.50
C1030CP	32	19	300	142.50
D1030CP	115	4.6	300	142.50
E1050CP	24	33	500	163.88
C1050CP	32	25	500	163.88
D1050CP	115	7	500	161.25
C1075CP	32	32	750	184.50
D1075CP	115	8.8	750	184.50

*Equipped with manual frequency control. For frequency control on all other models, add **$59.25** to net prices. Filter available; add **$30.00** to net prices.

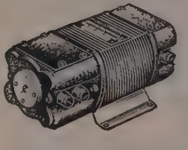
MONARCH CONVERTERS

The Monarch series is ideal for heavy-duty industrial service, marine, mine, crane and railroad communications. Slow speed (1800 rpm.), long life, 4-pole design; ball bearing equipped. **No filter is necessary for most applications.** Size: 19" x 11" x 12" high. Three-phase output available at no extra charge. 24 and 28 v. input available.

Carter Number	DC Input Volts	DC Input Amps	Watts at 115 v. AC, 60 cps	Net Each
C10150M	32	69	1500	$480.00
W10200M	48	60	2000	517.50
H10200M	64	45	2000	517.50
D10200M	115	25	2000	517.50
K10200M	230	12.5	2000	532.50

Note: DC starters necessary on above models; add **$70.50** to net.

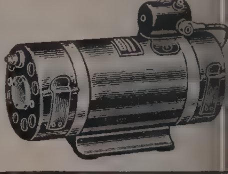
DUOVOLT 6/12 VOLT GENEMOTORS



Will operate 30- to 100-watt mob transmitters. Incorporates two se rate six-volt windings, each having own field. Six or twelve volt operat is obtained simply by connecting four input leads in parallel or in ser May be transferred from one car another regardless of battery volta without replacing generator and w out wiring modification of hook Size: 3½" high, 4¾" wide, 8" lon Weight, 11½ lbs.

Carter No.	Input Volts	Input Amps	Input Volts	Input Amps	Output Volts	Output Amps	Duty	Net Each
450ABNS	6	29	12	14.5	400	.250	Int.	$73.
4030VBNS	5.2	40	10.4	20	400	.300	Int.	74.
4228VBNS	5.8	33	11.6	16.5	420	.280	Int.	74.
4432VBNS	5.8	42	11.6	21	430	.325	Int.	74.
520ABNS	6	28	12	14	500	.200	Int.	75.
624VBNS	5.7	46	11.4	23	600	.240	Int.	75.
6427VBNS	5.7	51	11.4	25.5	640	.270	Int.	77.
7212ABNS	6.1	28	12.2	14	720	.125	Int.	77.

CHANGE-A-VOLT DYNAMOTORS



Operate 6 volt 2-way radio equipment from 12 volt systems without rewiring. Supplied complete with starting relay and switch, 12 volt fuse block and wiring to directly convert a 12 volt battery to a 6 volt radio supply. B615V delivers 15 amps continuously and 45 amps intermittent. 65% efficiency. Can also serve as battery equalizer when operating low voltage equipment. Size: 11⅛" x 4½" x 7¹⁄₁₆" high. Weight, 25 lbs.

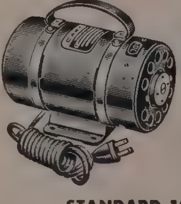
Carter No.	Input* Volts	Input* Amps	Net Each	Carter No.	Input† Volts	Input† Amps	Net Each
B615V	12	11.5	$88.50	E128V	24	6.0	$88.5
E615V	24	5.7	88.50	J128V	28	5.3	88.5
J615V	28	5.0	88.50	C128V	32	4.6	88.5
C615V	32	4.3	88.50	HS128V	70	2.2	88.5
HS615V	70	2.1	88.50	D128V	115	1.3	88.5
D615V	115	1.2	88.50	.....	.	....	....

*Output 6 volts, 15 amps. †Output 12 volts, 8 amps.

MARINE REFRIGERATOR-APPLIANCE CONVERTERS

Operates standard refrigerators, compressors, vacuum clean and other appliances from DC; for use aboard commercial pleasure-boats. Converter operates only when power is ca for. Input, from 24 to 115 v. DC. Size: 14" x 6¾" x 11" hi Net Weight, 65 lbs.
All Models, Net Each.............................. $336

MARK II SUPER CONVERTERS



New, long life design increases bru life and assures dependable serv Smooth, quiet, ball bearing operati Standard 100% P.F. models change to AC for operating amplifiers, of equipment, test instruments, ra and other high-power-factor equ ment. Also available in 70% P.F. m els to operate popular tape recor from DC input. Many other cat models available promptly from fact stock. A converter can be furnishe operate any tape recorder. Continu duty. Size: 8¼" x 4½" x 5" hi Weight, 13 lbs.

STANDARD 100% PF CONVERTERS

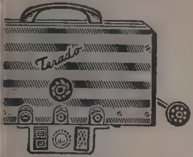
Carter No.	DC Input Volts	DC Input Amps	Watts, AC at 60 cps, 115 v.	Net Each
D1040CB	115	.7	40	$86.2
D1010CB	115	1.7	100	88.5
D1015CB	115	2.0	150	89.2
B1040CB	12	8	40	79.5
B1010CB	12	15	100	81.7
B1015CB	12	23	150	82.5
Mark II Heavy Duty Super Converter. Continuous duty, filter, 10¼" long, 4½" wide, 5" high. Weight, 19 lbs.				
D1020CB	115	2.6	200	$99.0
D1025CB	115	3.2	250	99.0
B1020CB	12	30	200	92.2
B1025CB	12	34	250	92.2

AC TO AC FREQUENCY CHANGERS

Changes 25 to 400 cycle AC input to 50 or 60 cycle output. Mod from 40 to 2,000 watt capacity. Write for information and pric

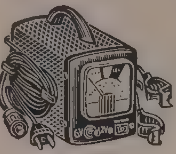
rado DC-AC Converters, Chargers, Lamps

VERTERS—110 VOLT AC 60 CYCLE

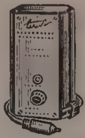


UPREME WITH
MOTE CONTROL

BATTERY CHARGERS

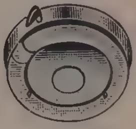


10 AMP

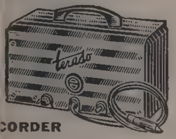


5 AMP

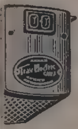
ROV-A-LITE



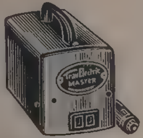
22-WATT



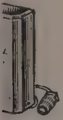
CORDER



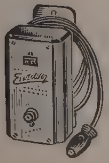
CHIEF



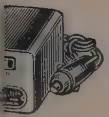
UTOMATIC, SUPER,
AND MASTER



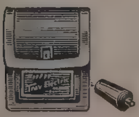
ELECTRA



TSMAN



SENIOR



O
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CONVERTERS

SUPREME

Converts 12 v. DC to AC; power output, 175-200 watts. Complete with wire for installation and remote control. Remote control has variable AC output switch and signal light indicating proper AC output voltage. Equipped with cooling fan. Filtered for use with tape recorders and portable TV. Steel case. Two tone striped gold finish. **Size:** 10¾″ w. x 6″ d. x 6″ h. Shipping Weight, 25 lbs.
Terado No. 50153—
Net Each.......................... $\$66^{63}$

RECORDER

Same case as "Supreme" less remote control. Input, 12 v. DC; output, 150-175 w. Plugs into cigarette lighter. Hi-low voltage selector switch to maintain proper output voltage. Filtered for use with tape recorders and portable TV. **Size:** 10¾″ w. x 6″ d. x 6″ h. Shpg. Wt., 21 lbs. $\$59^{97}$
Terado No. 50175—Net Each........

CHIEF

Operates tape recorders, power tools, dictation machines, mixers, blenders, etc. Two models available. Direct connection to battery. Front AC receptacle. Toggle switch output control. Ventilated steel case. Easy to mount. **Size:** 3½″ w. x 6½″ d. x 4″ h. Shipping Weight, 8 lbs.

Terado No. 50137—Voltage input, 6 v. AC Power Output, 75-100 watts. Net. $\$43^{30}$

Terado No. 50138—Voltage input, 12 v. AC Power Output, 100-125 watts. Net. $\$43^{30}$

AUTOMATIC

Operates automatically from 6 or 12 v. DC without vibrator change or switching (6 v., 55-75 watts; 12 v., 85-110 watts). Easy installation into cigarette lighter. For dictation machines, radios, tape recorders, phonographs, heating pads, etc. Steel case. Seal brown baked enamel. **Size:** 3½″ w. x 6½″ d. x 4″ h. Shpg. Wt., 8 lbs. $\$36^{63}$
Terado No. 50134—Net Each........

SUPER

Operates dictation machine, radios, phonograph, tape recorders, massaging equipment, etc. Two compact, lightweight models available. Simple installation into cigarette lighter. Steel case. Seal brown baked enamel. **Size:** 3½″ w. x 6½″ d. x 4″ h. Shipping Weight, 8 lbs.

Terado No. 50126—Voltage input, 6 v. AC Power Output, 60-75 watts. Net.. $\$31^{30}$

Terado No. 50127—Voltage input, 12 v. AC Power Output, 75-100 watts. Net. $\$31^{30}$

MASTER

Operates some dictation machines and tape recorders, radios and phonographs, emergency lighting, etc. Easy to install into cigarette lighter. Steel case. Seal brown baked enamel. **Size:** 3½″ w. x 6½″ d. x 4″ h. Shipping Weight, 6 lbs.

Terado No. 50121—Voltage input, 6 v. AC Power Output, 50-60 watts. Net.. $\$25^{97}$

Terado No. 50122—Voltage input, 12 v. AC Power Output, 60-75 watts. Net.. $\$25^{97}$

ELECTRA

Glove compartment size converters, available in 6 v. or 12 v. input. Easy installation into cigarette lighter. Operates De Jur Stenorette, Geloso, G.B.C., Stenocord, Norelco dictation machines, radios, etc. Vinyl coated steel case with leatherette appearance. **Size:** 3″ w. x 2¼″ d. x 5½″ h. Shipping Weight, 3 lbs.

Terado No. 50174—Voltage input, 6 v. AC Power Output, 32-42 watts. Net.. $\$16^{63}$

Terado No. 50167—Voltage input, 12 v. AC Power Output, 42-52 watts. Net.. $\$16^{63}$

SPORTSMAN

Same as "Electra" but with 20-ft. cigarette lighter cord and AC switch. Available in 12 v. input only. Ideal for use by campers, picnickers, boaters. Applications, size, and weight same as "Electra".

Terado No. 50179—Voltage input, 12 v. AC Power Output, 42-52 watts. Net.. $\$19^{97}$

SENIOR

Operates radios, lights, phonographs and small tape recorders. Available in 6 v. or 12 v. input. Simple to install into cigarette lighter. Aluminum case. Seal brown baked enamel. **Size:** 2½″ w. x 4½″ d. x 2¼″ h. Shipping Weight, 3 lbs.

Terado No. 50115—Voltage input, 6 v. AC Power Output, 35-40 watts. Net.. $\$14^{63}$

Terado No. 50116—Voltage input, 12 v. AC Power Output, 40-50 watts. Net.. $\$14^{63}$

AUTO SHAVER

Operates all electric shavers by plugging into AC receptacle provided. Available in 6 v. or 12 v. input. Easy installation into cigarette lighter. Polyethylene non-breakable case. **Size:** 3⅝″ w. x 2¼″ d. x 4¼″ h. Shipping Weight, 2 lbs.

Terado No. 50102—Voltage input, 6 v. AC Power Output, 10-15 watts. Net Ea.. $\$8^{63}$

Terado No. 50103—Voltage input, 12 v. AC Power Output, 15-20 watts. Net Each. $\$8^{63}$

BATTERY CHARGERS

HI-POWER

Very efficient full wave 5 amp, 12 v. battery charger using two miniature silicon rectifiers and special transformer steel. Simple to operate; just plug into cigarette lighter of car and 110 v. AC outlet in garage and let charge overnight. Indicator light tells condition of battery. Complete with display. **Size:** 3″ w. x 2¼″ d. x 5½″ h. Shipping Weight, 3 lbs. $\$13^{96}$
Terado No. 50180—Net Each........

SUPER CHARGER

Very efficient full wave 10 amp, 6/12 v. battery charger; uses two miniature silicon rectifiers and special transformer steel. Charges at same rate on either 6 or 12-volt batteries. Battery clamps provided. Can also be plugged into cigarette lighter. Automatic circuit breaker. Ten-ampere meter shows condition of battery. **Size:** 3⅛″ w. x 6½″ d. x 5″ h. Shipping Weight, 7½ lbs. $\$27^{96}$
Terado No. 50181—Net Each........

ROV-A-LITE

Dual voltage fluorescent lamp. Operates on battery or 110 v. AC. Heavy chrome plated fixture. Complete with standard white tube. **Size:** 10″ dia. x 2½″ thickness. Shipping Weight, 7 lbs.

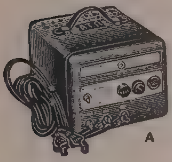
Terado No. 50146—Six volts DC and 110 v. AC, 22 watts. Net Each....... $\$24^{46}$

Terado No. 50147—Twelve volts DC and 110 v. AC, 22 watts. Net Each... $\$24^{46}$

WE CARRY A COMPLETE INVENTORY OF CONVERTERS AND CHARGERS, PLEASE DO NOT HESITATE TO INQUIRE ABOUT UNLISTED OR NEW ITEMS.

Inverters, Battery Eliminators

ATR INVERTERS, SHAV-PAKS AND ELIMINATORS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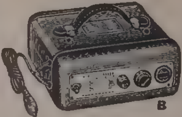
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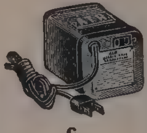
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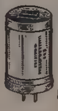
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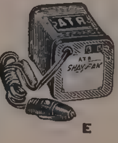
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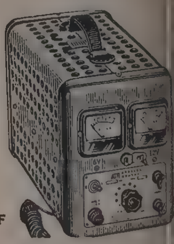

F

UNIVERSAL INVERTERS (FIG. A)

Specially designed for operating standard AC tape recorders, TV sets, dictating machines, radios, ham gear, PA amplifiers, phonos, some household appliances, etc., from DC voltages found in autos, trucks, planes, trains, etc. Long life, high efficiency and reliability. **Power Output:** 110 v. AC, 60 cps. **Suffix P** indicates models equipped with cigarette lighter plug for dash receptacle. **RSF** types are standard models, 8½" x 9⅞" x 5¼"; Shpg. Wt., 22 lbs. **RHG** heavy duty, 6⅞" x 11¼" x 8½"; Shpg. Wt., 27 lbs. **HSJ** super heavy duty, 6½" x 12⅞" x 8½"; Shpg. Wt., 37 lbs.

ATR No.	Input DC Volts	Output Wattage Int.	Output Wattage Cont.	Net Each
6U-RSF	6	100	80	**$ 50.00**
6U-RSF-P	6	100	80	**50.00**
6U-RHG	6	150	125	**66.34**
6U-HSJ	6	175	150	**83.34**
12U-RSF	12	125	100	**50.00**
12U-RSF-P	12	125	100	**50.00**
12U-RHG	12	175	150	**66.34**
12U-HSJ	12	250	200	**83.34**
28U-RSF*	28	125	100	**59.97**
28U-RHG*	28	175	150	**79.67**
28U-HSJ*	28	250	200	**96.67**
32U-RSF	32	150	100	**59.97**
32U-RHG	32	200	180	**70.50**
32U-HSJ	32	325	225	**96.67**
50U-RSF	50	150	100	**59.97**
50U-RHG	50	225	200	**79.67**
110U-RSF	110	250	150	**50.00**
110AU-RHG	110	325	250	**59.97**
110BU-RHG	110	450	350	**70.50**
110U-HSJ	110	600	400	**96.67**
220U-RSF	220	250	150	**53.00**
220U-RHG	220	325	250	**66.34**
220U-HSJ	220	500	300	**103.34**

*Recommended for 24-volt systems.

PORTABLE INVERTERS (FIG. B)

Lightweight plug-in units for operating AC lamps, dictating machines, record players, razors, test equipment and other small devices from DC sources. Not recommended for tape recorders. Units of 6 and 12 volt type equipped with cigarette lighter plug for dash receptacles; all others have standard line plug. **RME** and **RMF** types have 4-point voltage regulator; size 8⅜" x 8" x 3¾"; Shpg. Wt., 12 lbs. **DME** units are 5¼" x 4¾" x 2¾"; Shpg. Wt., 5 lbs. **Power Output:** 110 v. AC, 60 cps.

ATR No.	Input DC Volts	Output Wattage Int.	Output Wattage Cont.	Net Each
6-DME*	6	40	30	**$16.63**
6C-DME*	6/12	40	30	**19.30**
6-RMF†	6	80	60	**33.00**
6C-RMF†	6/12	80	60	**36.64**
12-DME*	12	50	40	**16.63**
12T-RME†‡	12	125	90	**33.00**
28-RME†§	28	100	80	**46.34**
32-RME†	32	100	80	**46.34**
110-RME†	110	150	100	**39.67**

Recommended for: *Edison VP dictating machines; may be used with Model 200 Soundscriber. †Dictaphone's Time Master, Gray Audograph or similar. ‡For RCA 8½" portable TV or GE 9" TV sets in automobile. §Recommended for 24-volt battery systems.

ELECTRONIC TUBE PROTECTORS

Two new models; protect all electronic tubes in TV, Hi-Fi, or similar equipment. Will double or triple tube life. Thermal cushion action eliminates damaging surge currents. For use with equipment having input wattage of 100 to 300 watts. Unit plugs into AC wall socket. Rugged metal case construction; automatic operation.

ATR Model 300 (Fig. C)—With line cor and wall plug for additional flexibili Size: 4" x 2⅝" x 2¾". Shipping Weight, 2 lbs. Net Each....... **$3.30**

ATR Model 250 (Fig. D)—Size: 1¹⁵⁄₁₆" di x 3⅛" long. Plugs directly into wall socket. Shpg. Wt., 1 lb. Net Ea. **$2.83**

SHAV-PAKS (FIG. E)

Miniature DC to AC inverters for opera ing standard AC electric shavers from 6 12 volt DC sources. Plugs in cigaret lighter receptacle. May be used for oth AC devices requiring no more than watts. Size, 4" x 2⅝" x 2¾". Shippi Weight, 2½ lbs.

ATR Model 6-SPB—For 6 v. DC sources. Net Each................ **$7.97**

ATR Model 12-SPB—For 12 v. sources. Net Each................ **$7.97**

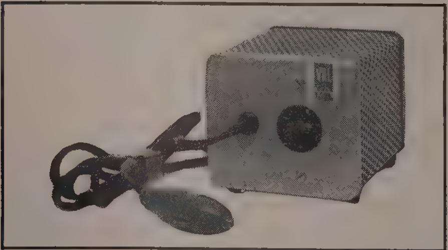
"A" BATTERY ELIMINATORS (FIG. F)

For testing and operating auto radios a DC electrical apparatus on regular A lines of 105-125 volts, 50-60 cps. Opera 6 or 12 v. DC transistor or vibrator o erated radios. Units may be connected series for higher voltages or parallel f higher currents: Features: On-off swit 8-position voltage control, minimum ri ple, fully automatic operation, full-wa dry disc selenium rectifier for noisele interference-free life and 6 ft. rubb cord set.

ATR Model 610C-ELIF—Rated outp 6 v. DC at 10 amps. and 12 v. DC at amps., continuous. Size: 6½" x 9⅛" x Shipping Weight, 22 lbs. Net Each.................. **$49.95**

ATR Model 620C-ELIT—Rated outp 6 v. DC at 20 amps. and 12 v. DC at amps., continuous. Size: 6½" x 12⅞" 8½". Shipping Weight, 33 lbs. Net Each.................. **$66.95**

VRL TRANSVERTERS



- **Unlimited life.**
- **Smaller, lighter, more efficient than vibrator equipment.**
- **Output frequency continuously adjustable.**
- **Can operate low power factor loads.**
- **No RF noise.**
- **No spikes.**
- **No pulses.**
- **Two-year factory warranty.**

Fully transistorized DC to AC inverters. Lightweight plug-in units for operating record players, TV sets, radios and other devices from DC voltages. No mechanical moving parts, no contacts, nothing to wear out. Not affected by humidity or prolonged storage. Up to 50% smaller and lighter than vibrator equipment. Efficiencies of over 90%. No RF noise, no spikes, no pulses. Can operate low power factor loads. Output frequency continuously adjustable from 55 to 65 cps on calibrated dial. Setting independent of input voltage or load. 115 v. AC, 60 cps output. The 30-watt unit plugs into the automobile cigarette lighter. Gray hammertone finish. Two-year factory warranty.

VRL No.	Input VDC	Output Watts	Size, Inches W. x D. x H.	Wt. Lbs.	Net Each
6T11A*	6	30	3⅜ x 4⅛ x 3¼	3	**$ 34.95**
6T11	6	30	3⅜ x 4⅛ x 3¼	3	**53.95**
6T12	6	80	3⅞ x 6⅛ x 3⅞	8	**102.10**
6T13	6	150	3⅞ x 6⅛ x 3⅞	8	**147.50**
12T11A*	12	40	3⅜ x 4⅛ x 3¼	3	**33.95**
12T11	12	40	3⅜ x 4⅛ x 3¼	3	**53.95**
12T12	12	80	3⅞ x 6⅛ x 3⅞	8	**68.95**
12T13	12	150	5 x 7⅛ x 4⅜	12	**117.85**
12T14	12	250	5½ x 8 x 4¾	15	**172.50**
28T13	28	120	5 x 7⅛ x 4⅜	12	**112.50**
28T14	28	250	5½ x 8 x 4¾	15	**175.50**
28T15	28	500	5¾ x 9⅝ x 5¼	28	**265.40**
32T13	32	130	5 x 7⅛ x 4⅜	12	**118.00**
32T14	32	250	5½ x 8 x 4¾	15	**197.50**
32T15	32	500	5¾ x 9⅝ x 5¼	28	**309.50**

*Frequency independent of input voltage only.

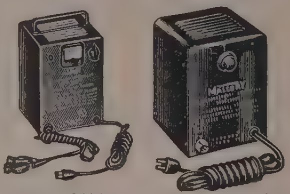
PLEASE REFER TO THE INDEX FOR RELATED PRODUCTS AND ACCESSORIES. CONSULT WITH OUR EXPERIENCED STAFF ON ANY TECHNICAL PROBLEMS.

306-59B

allory Chargers and Rectifiers

AUTOMOTIVE, MARINE AND AVIATION BATTERY CHARGERS

tly and economically charges 6- and automotive, marine and aviation batteries. Full-wave rectification xcept 6AC75, which uses a MgCuS r stack. Automatic reclosing circuit r protects charger and battery from tal reverse connection. Taper g protects plates from overcharging e. Indicator light on some models is when charging begins, dims as bat- comes charged, flashes to indicate d connection. All models are sup- ith Type R675 cigarette lighter DC sted at right. All models operate on 0-volt, 60-cycle AC. U/L approved y duty SJ cord.



12SAC10D 6SAC10 12SAC5

CHARGER CABLE ASSEMBLIES

Model R670—Polarized Battery Clip DC Cord Assembly for 6SAC4, 6SAC6, 6SAC10, 12SAC5 and 12SAC10D. Net Each........................ **$1.30**

Model R675—Universal Cigarette Lighter Plug DC Cord Assembly. Plugs into cigarette lighter. For Models 6SAC4, 6SAC6, 6SAC10, 12SAC5 and 12SAC10D. Net Each........................ **$1.50**

Model R653—Extra Battery Clip. Net Each........................ **17c**

lory nber	Btry. DC Volts	DC Amperes Charge Rate	DC Amperes Taper Rate	Approximate Charge Ampere-Hours in 1 Hr.	6 Hrs.	10 Hrs.	14 Hrs.	Max. Cont. DC Amps. as Pwr. Supply	Charging Indicator	Dimensions H x W x D In Inches	Net Each
	6	4	4	..	20	30	42	3	None	4⅝ x 4¼ x 4⅜	$13.30
	6	6	4	..	32	50	70	5	Light	6⅞ x 4⅞ x 4¾	15.30
0	6	10	7	..	50	85	120	8	Light	7⅞ x 6½ x 5¾	22.63
5	12	5	3	..	25	40	56	4	Light	7⅞ x 6½ x 5¾	22.63
10D	6	20	15	18	105	..	...	16	Meter‡	9⅛ x 6½ x 5¾	44.63
	12	10	8	9	53	....	....	8	....	....	

ammeter.

MAGNESIUM-COPPER SULPHIDE RECTIFIERS

y Magnesium-Copper Sulphide rec- are rugged, dependable units for ations requiring low DC voltages lium and high currents, such as bat- liminators and chargers, electro- g, DC filament voltage supplies, d and relay operation, etc. All metal struction, not sensitive to tempera- withstand a great deal of abuse, e from −90° to +265° F. Rectifying lf healing. These rectifiers are avail- either foot, bolt, or stud mounting. sal mounting hardware provided ver possible or practical. To des- the type of mounting hardware ed, the following prefixes are placed the stock No.: **IB** for insulated for grounded bolt; **F** for grounded **IF** for insulated foot; **IS** for in- stud. **P** suffix designates reverse y stacking. Center terminal is DC e: **J** suffix designates universal con- on with loose mounting feet for olt, or stud mounting. All rectifiers gle phase, full wave, bridge type.

Mallory No.	Max. AC Volts No Load	Max. AC Volts Full Load	Approx. DC Volts Ind. Load	Approx. DC Volts Res. Load	Approx. DC Volts Cap. Battery Load	Max. DC Amps Con. Duty	Max. DC Amps Int. Duty	Size Inches L	W	H	Net Each
IB4R	3.6	3.2	1.5	1.7	2.5	1.5	5.0	1	9/16	⅞	$1.93
IB8R	7.2	6.4	3.1	3.4	5.1	1.5	5.0	1⅜	9/16	⅞	2.30
IB12R	10.8	9.7	4.8	5.2	7.8	1.3	5.0	1¾	9/16	⅞	2.63
IB12L5	10.8	9.7	4.5	5.0	7.6	4.5	15	2½	2⅛	2⅝	4.73
IB12C1J	10.8	9.8	4.6	5.1	7.7	3.2	24	2¾	1¼	1⅝	4.84
IB12C3	10.8	9.7	4.5	5.0	7.6	4.5	24	2¾	1¾	2⅛	5.50
IB12C5	10.8	9.7	4.5	5.0	7.6	5.3	24	3	2⅛	2⅝	5.97
F16C3	14.4	13.0	6.1	6.8	10.2	3.9	24	3	1¾	2⅛	7.13
IF16CB7M	14.4	12.8	5.9	6.6	9.9	6.0	24	3	2½	3 3/16	8.20
F20C7	18.0	16.2	7.6	8.4	12.6	4.8	24	4⅜	2½	3 3/16	8.49
IS16CB7	14.4	12.8	5.9	6.6	9.9	6.0	24	3¾	2½	3.0	8.20
IS16B7	14.4	12.8	5.8	6.5	9.8	8.3	24	5½	2½	3.0	9.07
IS16B9	14.4	12.7	5.7	6.4	9.7	11.6	24	5½	3½	4¼	10.33
IS24C7J	21.6	19.4	9.0	10.1	15.1	4.0	24	4¾	2½	3 3/16	10.30
IS24B9	21.6	19.1	8.5	9.6	14.4	11.0	24	7½	3½	4¼	14.47
IS28C7J	25.2	22.7	10.7	11.7	17.8	4.3	24	6	2⅛	3	12.33

REPLACEMENT SELENIUM RECTIFIERS SINGLE-PLATE ASSEMBLIES

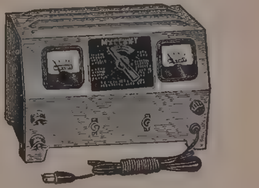
ry ber	AC Input Volts RMS ** Design #	Max. #	Approximate DC Output* Full-Wave Center Tap‡ Res.-Ind. Load DC Volts	DC* Amps.	Cap.-Btry. Load DC Volts	DC* Amps.	Full-Wave Bridge‡ Res.-Ind. Load DC Volts	DC* Amps.	Cap.-Btry. Load DC Volts	DC* Amps.	Approximate Overall Dimensions In Inches L. W. T.	Replacement In Mallory (No. of Assemblies Per Unit)	Net Each
	24	26	9	5.7	12.5	4.6	18	5.7	25	4.6	3 x 3 x ¼	6SAC4 (2) 6SAC6 (2) 12RS6D (2)	$1.30
	28	30	10.5	5.7	14.5	4.6	21	5.7	29	4.6	3 x 3 x ¼	12SAC5 (2) 12RS5 (2)	1.50
	24	26	9	11.0	12.5	8.8	18	11.0	25	8.8	4 x 4 x ¼	6SAC10 (2)	1.87
	24	26	9	21.0	12.5	17.0	18	21.0	25	17.0	5 x 6 x ¼	6SAC20 (2) 12RS14D (2)	2.53
	24	26	9	....	12.5	....	18	....	25	....	....	6RS25 (2)	3.57
#	24	26	9	34.0	12.5	28.0	18	34.0	25	28.0	6 x 8 x ¼	6RS25 (2) 6RS25-1 (2) 12RS14D (2)	3.57
	24	26	9	10.5	12.5	8.5	18	10.5	12.5	8.5	4 x 8 x ¼	12RS6D (1)	3.43
	24	26	9	10.0	12.5	8.0	18	10.0	12.5	8.0	5 x 6 x ¼	12SAC10D (2)	3.23

urrent ratings based on conduction cooling—plates not more 8″ from cabinet wall or other large area member.
uces by 55% for ½-wave capacitive and battery load.
nter-tap, full-wave circuits, AC voltages shown are for full ormer secondary.

†One insulated and eyeleted cell per plate assembly; R26R and R26T each have two.
‡Two plate assemblies per circuit for full-wave center tap, four per circuit for full wave bridge except R26R and R26T have one per circuit center tap, one and two for bridge.

RECTOPOWER® DC SUPPLIES

de 6, 12, 14 or 28 volts DC from 110-120-volt, 60-cycle AC for auto radios, two-way telephone transceivers, amateur radio equipment, military equipment, etc. Supplies ered, continuously variable DC power source. Accurate DC voltmeters and DC ters on all units. Self reclosing overload circuit breakers in the DC circuits and fuse ction in AC circuits. RMS ripple less than one volt. Continuously adjustable trans- r-rotor system provides precise adjustment of output voltage from 0 to the rated t voltage. On-Off switch. Selenium rectifiers.



12RS6DF

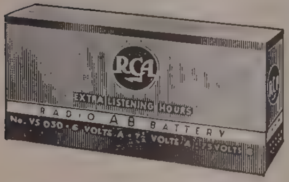
ory o.	DC Output DC Volts Rating	DC Volts Range	DC Amps Cont.	DC Amps Interm.	Approx. Output Reg.	Approx. AC In. Watts	Dimensions H x W x D Inches	Shpg. Wt. Lbs.	Net Each
6DF	6 or 12	0-8 or 0-16	10 or 6	20 or 14	95% or 65%	150	6¾x10⅜x5½	12½	$59.95
14D*	6 or 12	0-8 or 0-16	25 or 14	40 or 20	20% or 8%	325	11x10½x8¾	35	139.50
15D*	28 or 14	0-32 or 0-16	15 or 30	25 or 50	5% or 8%	800	11x10½x15⅜	60	224.50

automatic voltage regulating system.

l MA-6 Filter Pack—For old Model 12RS6D. Filters up to 6 amps. output at under pple. Ammeter with automatic return switch. Shpg. Wt. 5¼ lbs. Net Each **$17.50**

RCA Radio Batteries

RADIO-ENGINEERED FOR EXTRA LISTENING HOURS



RCA
EXTRA LISTENING HOURS
RADIO AB BATTERY
No. VS019 · 9 VOLTS A · 90 VOLTS B

RCA
RCA
EXTRA LISTENING HOURS

RCA
RADIO A BATTERY

RCA
EXTRA LISTENING HOURS
INDUSTRIAL B BATTERY
No. VS114 · 22½-45 VOLTS
RCA
EXTRA LISTENING HOURS
RADIO B BATTERY
No. VS013 · 45 VOLTS

PORTABLE "A" BATTERIES

RCA Type	Voltage	Terminal Type‡	Interchangeable With			Dimensions, In. L. x W. (or Dia.) x H.	Unit Pkg. Qty.	List Price	Net Each
			Eveready	Neda	Burgess				
VS002	4½	S	746	7	G3	4 x 1 3/8 x 4 11/16	6	$ 1.35	$0.94
VS004	1½	S	742	4	4F	2 5/8 x 2 5/8 x 4 1/16	6	1.65	1.15
VS009	6	S	744	6	4FPI	2 23/32 x 2 23/32 x 4 5/16	6	1.50	1.04
VS010	6	S	718	1	2F4	3 7/8 x 2 13/16 x 5 1/2	5	3.90	2.73
VS035*	1½	F	935	14	1	1 x 1 15/16	25	.20	.12
VS036*	1½	F	950	13	2R	1 5/16 x 2 3/8	48	.20	.12
VS065	7½	S	717	9	C5	2 7/32 x 1 15/16 x 3 1/32	12	1.50	1.05
VS067	4½	S	736	3	F3	4 x 1 7/16 x 4 3/16	6	1.17	.82
VS068	6	F	724	2	Z4	1 1/4 x 1 1/4 x 2 7/16	12	.90	.63
VS069	1½	S	720	18	2D	2 5/8 x 1 1/8 x 2 15/16	6	1.60	.69
VS072	4½	S	726	19	D3	3 31/32 x 1 7/16 x 3	12	1.10	.79
VS129	7½	S	713	8	B5	4 1/16 x 15/16 x 3	12	1.80	1.26
VS236*	1½	Ft	964	20	21R	1 3/8 x 4 11/64	12	.40	.28
VS315	7½	SF	707	26	D5	2 9/16 x 2 1/32 x 2 13/16	6	1.50	1.05

PORTABLE "B" BATTERIES

RCA Type	Voltage	Terminal Type‡	Eveready	Neda	Burgess	Dimensions, In. L. x W. (or Dia.) x H.	Unit Pkg. Qty.	List Price	Net Each
VS012	45	S	484	207	B30	3 31/32 x 2 17/32 x 5 5/16	6	$ 4.25	$2.98
VS013	45	S	482	202	M30	3 19/32 x 1 27/32 x 5 1/2	6	3.50	2.45
VS014	45	S	W359	206	A30	3 7/16 x 2 1/4 x 4 9/16	6	3.55	2.49
VS015	22½-45	S	738	205	Z30	3 x 2 5/16 x 4 1/8	10	3.95	2.76
VS016	67½	SF	467	200	XX45	2 13/16 x 1 3/8 x 3 45/64	6	3.50	2.45
VS055	45	SF	455	201	XX30	2 21/32 x 1 x 3 11/16	6	2.95	2.08
VS082	67½	SF	457	203	K45	2 13/16 x 1 3/8 x 2 1/2	6	3.15	2.21
VS084	22½	Ft	412	215	U15	1 1/32 x 5/8 x 2	..	1.50	1.05
VS086	45	SF	415	213	U30	1 3/64 x 5/8 x 3 11/16	6	2.50	1.75
VS090	90	SF	490	204	N60	3 23/32 x 1 3/8 x 3 45/64	6	4.50	3.15
VS215	67½	SF	477	211M	P45M	1 29/32 x 1 x 5 7/16	6	3.50	2.45
VS216	67½	SF	477	211M	P45M	1 15/16 x 1 1/32 x 5 9/16	6	3.95	2.71
VS217	75	SF	437	212	XX50	1 15/16 x 1 15/32 x 6 15/32	6	4.15	3.15
VS218	67½	SF	477	211P	P42	1 29/32 x 63/64 x 5 7/16	6	3.10	2.17
VS219	90	SF	479	214	P60	1 31/32 x 1 1/32 x 7 15/32	12	3.95	2.77
VS316	90	SF	495	216	....	1 15/16 x 1 15/32 x 7 1/8	6	4.50	3.15
VS318	67½	SF	416	217	....	1 21/64 x 63/64 x 3 1/2	6	2.95	2.07

PORTABLE "AB" BATTERY PACKS

RCA Type	Voltage	Terminal Type‡	Eveready	Neda	Burgess	Dimensions, In. L. x W. (or Dia.) x H.	Unit Pkg. Qty.	List Price	Net Each
VS019	7½-9-90	S	753	401	F6A60	9 1/4 x 2 13/16 x 4 7/16	1	$ 7.75	$5.43
VS047	9-90	RP	752	400	G6B60	13 3/16 x 2 13/16 x 4 7/16	1	8.25	5.78
VS050	6-7½-75	S	755	403	T5Z50	8 5/8 x 2 1/2 x 3 11/16	1	6.50	4.55
VS054	1½-90	S	W369	410	6TA60	9 15/16 x 2 1/4 x 4 23/32	5	7.85	5.48
VS057W	7½-9-90	S	756	405	T6Z60	8 7/8 x 2 1/4 x 3 7/8	1	6.95	4.87
VS058	9-90	RP	757	406	F6A60P	9 13/16 x 2 3/4 x 4 7/16	1	7.25	5.08
VS059	9-90	RP	727	428	T6Z60P	9 7/16 x 2 1/4 x 3 13/16	1	6.85	4.80
VS060	7½-75	S	785	431	T5Z50P	8 9/16 x 2 7/16 x 3 11/16	6	6.90	4.83
VS064	1½-90	S	729	.....	4TZ60	7 13/16 x 2 1/4 x 3 13/16	1	5.75	4.03

TRANSISTOR BATTERIES

RCA Type	Voltage	Terminal Type‡	Eveready	Neda	Burgess	Dimensions, In. L. x W. (or Dia.) x H.	Unit Pkg. Qty.	List Price	Net Each
VS301	3, 6, 9	S	2506	1601	....	8 x 1 9/16 x 2 13/16	6	$ 2.25	$1.58
VS304	13½	S	239	1900	XX9	1 21/64 x 1 1/32 x 2 11/16	....	1.35	.95
VS305	9	SF	246	1602	2N6	1 13/32 x 1 11/32 x 3 3/16	....	1.85	1.30
VS306	9	SF	276	1603	D6	2 9/16 x 2 1/32 x 3 5/32	....	1.80	1.26
VS309	9	......	......	1606	....	35/64 x 1 29/32	12	1.61	1.13
VS311	4	......	......	1301	....	35/64 x 1 1/32	12	1.10	.77
VS312	8	SF	216	.....	....	1 x 19/32 x 1 15/16	....	2.25	1.58
VS313	1.4	F	E9	15	....	9/16 x 1 31/32	....	.75	.51
VS321	4½	......	2731	.....	....	....	12	2.75	1.93
VS400	4	F	E233	1300	....	1 1/16 x 1 31/32	10	2.65	1.80

LIGHTING—FLASHLIGHT BATTERIES

RCA Type	Voltage	Terminal Type‡	Eveready	Neda	Burgess	Dimensions, In. L. x W. (or Dia.) x H.	Unit Pkg. Qty.	List Price	Net Each
VS034	1½	F	915	15	Z	9/16 x 2	12	$ 0.15	$.0975
VS035*	1½	F	935	14	1	1 x 1 15/16	25	.20	.125
VS036*	1½	F	950	13	2	1 5/16 x 2 3/8	48	.20	.125
VS040C	6	CS	509	908	F4H	2 3/4 x 2 3/4 x 4 3/8	10	1.19	.79
VS040S	6	Sw	510S	915	F48P	2 3/4 x 2 3/4 x 4 1/4	10	1.19	.79
VS073	1½	F	W468	910	N	7/16 x 1 3/16	24	.125	.08
VS138	3	Cl	W357	901	4F2H	3 15/16 x 2 3/4 x 6 1/4	5	2.05	1.45
VS074	1½	F	912	24	7	7/16 x 1 3/4	24	.125	.08

FARM "AB" PACKS AND "B" BATTERIES

RCA Type	Voltage	Terminal Type‡	Eveready	Neda	Burgess	Dimensions, In. L. x W. (or Dia.) x H.	Unit Pkg. Qty.	List Price	Net Each
VS022	1½-90	S	759	413	17GD60	16 1/16 x 4 1/4 x 6 11/16	1	$ 9.65	$7.21
VS026	22½-45	S	W365P	717	2308PI	8 1/16 x 3 3/16 x 7 3/16	6	5.00	3.50
VS119	7½-9-90	RP,S	776	415	SD60	8 1/4 x 4 1/2 x 13 7/8	1	13.75	9.62

INDUSTRIAL, ELECTRONIC AND SPECIAL PURPOSE BATTERIES

RCA Type	Voltage	Terminal Type‡	Eveready	Neda	Burgess	Dimensions, In. L. x W. (or Dia.) x H.	Unit Pkg. Qty.	List Price	Net Each
VS006C	1½	Cl	6GL	914	....	2 5/8 x 6 5/8	12	$ 1.25	$0.84
VS006S	1½	Sw	61GN	905	61GN	2 5/8 x 6 5/8	12	1.25	.84
VS026	22½-45	S	W365P	717	2308PI	8 1/16 x 3 3/16 x 7 3/16	....	5.00	3.50
VS028	4½	Sw	781	714	5360	2 17/32 x 15/16 x 3 1/16	5	1.15	.81
VS029	1½-3-4½-6-7½	Sw,P	773	713	5540	4 1/8 x 15/16 x 3	5	1.95	1.35
VS039	6	Sw	1461	907	S461	10 3/8 x 2 7/8 x 7 3/8	4	4.98	3.34
VS070	1½	S	960P	23	8R	1 5/16 x 3 15/16	20	.65	.46
VS083	15	Ft	411	208	U10	1 1/32 x 5/8 x 1 29/64	20	1.15	.81
VS085	30	Ft	413	210	U20	1 1/32 x 5/8 x 2 9/16	20	1.75	1.23
VS093	300	PJ	493	722	U200	2 11/16 x 2 7/32 x 3 19/32	1	11.00	7.70
VS100	3	Sw	W352	701	F2BP	2 11/16 x 1 7/16 x 4 9/16	5	1.25	.87
VS101	1½	Sw	W354	700	2FBP	2 5/8 x 1 7/16 x 4 9/16	5	1.25	.87
VS102	22½	Sw	763	710	4156	3 1/4 x 2 1/8 x 2 13/16	5	2.35	1.61
VS103	6	Sw	706	902	4F4H	8 5/16 x 2 13/16 x 6 5/16	6	4.98	3.34
VS106	1½	Sw	735	900	4FH	2 11/16 x 2 11/16 x 4 3/16	10	1.25	.84
VS112	22½-45	Sw	W376	709	5308	4 3/16 x 2 11/16 x 6	5	4.35	3.05
VS114	22½-45	Sw	W350	711	Z30NX	3 x 1 7/8 x 4 15/16	5	3.85	2.69
VS126	22½-45	Cl	W365F	723	2308SC	8 1/16 x 2 15/16 x 7 5/8	5	5.50	3.84
VS127W†	22½-45	Cl	W363F	724	10308SC	8 3/16 x 4 7/16 x 8	5	6.90	4.84
VS130	1½-3-4½	Sw	761T	712	2370ST	4 x 1 7/16 x 3 1/16	5	1.65	1.17
VS131	22½§	Cl	778	708	5156SC	4 1/8 x 2 1/2 x 3 5/16	5	3.65	2.55
VS132†	9	Sw	....	909	D6BP	4 1/16 x 2 13/16 x 3	5	2.95	1.98
VS133	4½	FtS	703	706	532	2 3/8 x 15/16 x 3 1/16	5	1.02	.68
VS134	3	FtS	750	704	422	1 7/16 x 3/4 x 2 9/16	10	.85	.57
VS136	3	Sw	W356	703	2F2H	2 5/8 x 2 5/8 x 4 9/16	5	1.55	1.08
VS140	9	Sw	716	904	4FGH	8 37/64 x 4 1/16 x 6 7/16	5	7.50	5.03
VS139	7½	Sw	715	903	4F5H	7 1/4 x 4 x 6 5/16	1	6.45	4.32
VS141	1½	S	W353	11	2F	2 21/32 x 1 7/16 x 4 1/4	6	1.10	.77
VS142	4½	FtS	751	705	432	2 x 11/16 x 2 21/32	10	1.00	.66
VS157	22½-45	Cl	W364F	715	21308SC	8 1/8 x 4 5/8 x 7 11/16	5	6.95	4.88
VS157W	22½-45		......	.....	....	......	5	7.65	5.36
VS317	6	RL	731	.....	TW1	5 7/16 x 2 7/8 x 15/16	4	2.45	1.63

‡**Cl**, Spring Clip; **CS**, Coil Spring; **F**, Flashlight; **Ft**, Flat; **Ft. S**, Flat Spring; **P**, Pigtail; **PJ**, Pin Jacks; **RL**, Radar Lite; **RP**, Recessed Plug; **S**, Socket; **2S**, 2 Sockets; **SF**, Snap Fasteners; **Sw**, Screw. *Sealed-in-Steel. †Waxed coated. §Other taps at 3. 4½. 6, 9, 10½, and 16½ volts.

Prices include FET wherever applicable.

URGESS BATTERIES

P45

[redacted]

2

ACTIVATORS FOR TRANSISTOR CIRCUITS

ess	Volts	Size in Inches, L. x W. x H.	Unit Pkg.	List Price	Net* Each
	9, 13½	1 9/32x29/32x2 17/32	1	$1.35	$0.95
	9	2 9/16x2x3 5/32	1	1.80	1.26
	9	1⅜x1⅜x2¾	1	1.85	1.30
	9	1x39/64x1⅞	1	1.35	.95
	6	1 9/32x1 9/32x2 11/32	1	1.00	.69
	3, 6, 9	2 19/32x1 7/16x7 27/32	1	2.25	1.58
	9	2 5/16x1 1/32x6 1/16	1	1.60	1.10
	9	31/32x31/32x1 31/32	1	1.10	.77
	7½	2 9/16x2x2 23/32	1	1.50	1.05
	9	31/32x31/32x1 63/64	1	1.35	.93
	9	1 13/16x1 13/16x2 7/16	1	1.50	1.05
	9	2¼x1¼x7 29/32	1	1.50	1.05
	1½	63/64 (di.) x 1 15/16	12	.25	.155
	1½	1 31/64 (di.) x 2 25/64	24	.25	.155
	1½	35/64 (di.) x 1 31/32	12	.20	.13

PORTABLE RADIO "A" BATTERIES

	6	1 3/16x1 3/16x2 7/32	1	$0.90	$0.63
	4½	4x1 7/16x4⅛	6	1.17	.82
	1½	2⅝x2⅝x4 3/32	6	1.65	1.15
	6	2 21/32x2 21/32x4⅛	6	1.50	1.04
	4½	4 1/16x1⅞x4 11/16	6	1.20	.85
	7½	2 7/32x1 15/16x3 1/32	6	1.50	1.05
	7½	2 17/32x2 19/32x3 29/32	3	1.90	1.32
	1½	2 19/32x1⅜x4¼	1	1.10	.77
	1½	1 31/64 (di.) x 4⅛	12	.40	.28
	1½	1 31/64 (di.) x 2 25/64	48	.20	.13
	1½	63/64 (di.) x 1 15/16	12	.20	.13
	1½	35/64 (di.) x 1 31/32	12	.125	.08
	1½	2 9/16x1 9/32x2 31/32	1	1.00	.69
	4½	3⅞x1 5/16x2 15/16	6	1.10	.76

PORTABLE RADIO "B" BATTERIES

	67½	1 29/32x1x5 9/32	6	$3.10	$2.17
	67½	2¾x1 11/32x3 43/64	1	3.50	2.45
	45	2 17/32x31/32x3 31/32	6	2.75	1.92
	45	3 9/16x1¾x5½	1	3.50	2.45
	67½	2 11/16x1 5/16x2¼	6	3.15	2.21
	90	3 11/16x1 9/32x3 19/32	6	4.50	3.15
	45	3x2 5/16x4 1/16	2	3.95	2.76
	45	3 9/16x2¼x4 5/16	2	3.55	2.49
	45	4 1/16x2 17/32x5 5/16	2	4.25	2.98
	103½	1 11/32x1 11/32x11 23/32	1	6.57	4.60
	67½	1 29/32x1x5 9/32	6	4.00	2.75
	90	1 29/32x1x7 13/32	6	3.95	2.77
	75	1 27/32x1 5/16x6 5/16	6	4.50	3.15
	45	1 3/32x19/32x3 17/32	1	2.50	1.75
	67½	1 7/32x31/32x3 31/32	1	2.95	2.07
	90	1⅞x1 11/32x7⅛	1	4.50	3.15

ORTABLE RADIO "A" AND "B" BATTERIES

	9, 90	13 29/32x2 13/16x4 21/32	1	$8.25	$5.78
	7½, 9, 90	9 5/16x2 31/32x4 5/16	1	7.75	5.43
	6, 7½, 75	8½x3 11/32x2⅜	1	6.50	4.55
P	7½, 75	8½x3 11/32x2⅜	1	6.90	4.83
P	9, 90	9 7/16x2¾x4 11/32	1	7.25	5.08
P	9, 90	8 15/16x2 3/16x3 13/16	1	6.85	4.80
	1½, 90	7⅝x2⅛x3¾	1	5.75	4.03
	7½, 9, 90	8 15/16x2 3/16x3 13/16	1	6.95	4.87

FARM RADIO "A" AND "B" BATTERIES

60	1½, 90	15 11/16x4⅜x7 1/16	1	$ 9.65	$7.21
	7½, 9, 90	9⅞x4⅛x7 13/16	1	13.75	9.62

FARM RADIO "B" BATTERIES

PI	45	8⅛x4 15/32x7 9/32	1	$7.65	$5.36
SC	45	8⅛x4 15/32x7 9/32	1	7.65	5.36
PI	45	8 1/32x4 1/32x7 3/16	1	6.90	4.84
SC	45	8 1/32x4 1/32x7 3/16	1	6.90	4.84
	45	8 3/32x2 31/32x7¼	1	5.50	3.84
C	45	8 3/32x2 31/32x7¼	1	5.50	3.84

MERCURY ACTIVATORS

-	1.3	63/64(di.)x31/32	4	$0.80	$0.54
	4	1 1/32(di.)x1 31/32	1	2.65	1.80

DUSTRIAL AND ELECTRONIC "A" BATTERIES

	1½	2 21/32x1⅜x4 1/32	5	$1.15	$0.79
	3	2 21/32x1⅜x4 1/32	5	1.15	.79
	6	2⅝x2⅝x4	1	1.19	.79
	3	1 11/32x23/32x2 5/16	10	.85	.57
	4½	1 31/32x21/32x2¼	10	1.00	.66
	4½	2 15/32x13/16x2 23/32	1	1.02	.68

INDUSTRIAL AND ELECTRONIC "B" BATTERIES

Burgess No.	Volts	Size in Inches, L. x W. x H.	Unit Pkg.	List Price	Net* Each
5156SC	22½	4⅛x2½x2¾	5	$3.65	$2.55
5308	45	4 1/16x2 9/16x5⅛	1	4.35	3.05
4156	22½	3 17/32x2⅛x2 29/32	1	2.35	1.61
Z30NX	45	3 1/32x1⅞x4 19/32	5	3.85	2.69
W30	45	3x1¼x3 25/32	1	3.15	2.11
U200	300	2¾x2 9/32x3⅞	1	11.00	7.70
U10	15	1x39/64x1 7/16	1	1.15	.81
U15	22½	1x39/64x1 31/32	1	1.50	1.05
U20	30	1x39/64x2 17/32	1	1.75	1.23
Y10	15	19/32x19/32x1 23/64	1	1.15	.81
Y15	22½	19/32x19/32x1 31/32	1	1.50	1.05
Y20	30	1 3/16x19/32x1 13/32	1	1.85	1.30
Y20S	30	19/32x19/32x2 9/16	1	1.85	1.30

INDUSTRIAL AND ELECTRONIC "C" BATTERIES

2370PI	4½	4 1/64x1 27/64x2 63/64	5	$2.00	$1.38
5540	7½	4x⅞x2¾	5	1.95	1.35
5360	4½	2 13/32x27/32x2 21/32	10	1.15	.81
W5BP	7½	2 31/32x23/32x1¾	6	2.10	1.47

PHOTO-FLASH BATTERIES

120	1½	1 (di.) x 1 15/16	12	$0.25	$0.16
220	1½	1 11/32 (di.) x 2 25/64	12	.25	.16
920	1½	35/64 (di.) x 1 31/32	24	.20	.13
U15PF	22½	31/32x9/16x1 31/32	1	1.50	1.05
Y15	22½	19/32x19/32x1 31/32	1	1.50	1.05
Y10	15	19/32x19/32x1 23/64	1	1.15	.81
XX150	225	4¼x2⅝x4¼	1	9.95	6.96
U160	240	2 9/16x1 5/16x4 13/32	1	7.95	5.56
N150	225	3 9/16x2¾x4¾	1	7.95	5.56
U320	510	2 15/16x1 17/32x5 7/16	1	15.95	11.16

IGNITION AND TELEPHONE BATTERIES

4FH	1½	2⅝x2⅝x4	12	$1.25	$0.84
4F2H	3	3 29/32x2 11/16x5 13/32	1	2.05	1.45
4F4H	6	8 5/16x2 13/16x5 13/16	1	4.98	3.34
4F5H	7½	7 3/16x3 31/32x5 13/16	1	6.45	4.32
4F6H	9	8½x3 31/32x5 13/16	1	7.50	5.03
6 Ign.	1½	2½ (di.) x 6⅝	12	1.25	.84
6 Tele.	1½	2½ (di.) x 6⅝	12	1.25	.84
6 Ind.	1½	2½ (di.) x 6⅝	12	1.35	.90
S461	6	10½x2¾x7 13/32	6	4.98	3.34

FLASHLIGHT AND LANTERN BATTERIES

2	1½	1 31/64 (di.) x 2⅜	48	$0.20	$0.13
1	1½	63/64 (di.) x 1 15/16	12	.20	.13
Z	1½	35/64 (di.) x 1 31/32	12	.125	.08
7	1½	13/32 (di.) x 1¾	12	.125	.08
N	1½	7/16 (di.) x 1 11/64	24	.125	.08
F4H	6	2⅝x2⅝x4⅜	12	1.19	.79
4F2H	3	3 29/32x2 11/16x5 13/32	1	2.05	1.45
530	45	4 1/16x2 17/32x5 5/16	2	3.85	2.70
TW1**	6	5⅜x2⅞x4 15/16	1	2.45	1.63

**For use with Radar Lights.

NICKEL-CADMIUM SEALED, RECHARGEABLE CELLS AND BATTERIES

CD1	1.25	.460 (di.) x .225	1	$ 1.45	$ 1.00
CD2	1.25	.610 (di.) x .236	1	1.00	.70
CD8†	1.25	.984 (di.) x .232	1	1.10	.75
CD3†	1.25	.984 (di.) x .275	1	1.15	.78
CD4†	1.25	.984 (di.) x .350	1	1.20	.83
CD5†	1.25	1.700 (di.) x .300	1	2.10	1.47
CD6†	1.25	.560 (di.) x 1.950	1	2.75	1.93
CD9	1.25	.550 (di.) x 3.680	1	4.65	3.25
CD7†	1.25	1.300 (di.) x 2.425	1	5.00	3.50
CD21	6	1.065 (di.) x 1.525	1	7.15	5.00
CD22	6	1.065 (di.) x 1.975	1	7.50	5.25
CD23	6	1.800 (di.) x 1.725	1	14.50	10.15
CD24	9.6	1.065 (di.) x 2.650	1	11.60	8.15
CD25	9.6	1.065 (di.) x 3.110	1	12.10	8.50
CD26	9.6	1.800 (di.) x 2.575	1	22.50	15.85
CD27	12	1.065 (di.) x 2.925	1	14.00	9.80
CD28	12	1.065 (di.) x 3.600	1	15.20	10.65
CD29	12	1.800 (di.) x 3.100	1	27.95	19.50
CD30	6	1½x1½x3 13/16	1	26.40	18.46
CD31	6	3 13/16x1 17/32x3⅝	1	42.30	29.62

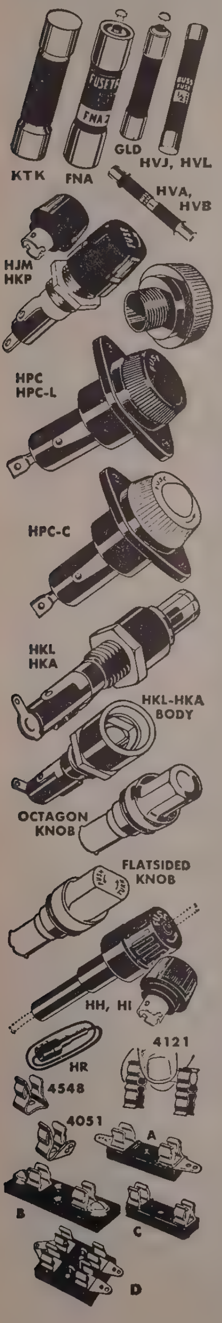
*In unit package. †Available with solder lugs on terminal; specify.

FLASHLIGHT CASES AND LANTERNS

Burgess No.	Description	Un[redacted] Pkg.	List Price	Net* Each
159	2-cell, prefocused, magnet flashlight (less batteries)	6	$1.79	$1.20
257	2-cell, baby prefocused, chrome and enamel (less batteries)	3	1.75	1.17
357	2-cell, prefocused, chrome and enamel (less batteries)	6	1.95	1.30
457	4-cell, prefocused, chrome and enamel (less batteries)	1	3.29	2.20
TW3	Radar-Lite (with Flasher), Spotlight Beam, complete with TW1 battery	1	12.40	7.63
[redacted]	Radar-Lite (without Flasher), Spotlight Beam, complete with TW1 battery	1	9.95	6.13
TW7	Radar Lamp, Chrome finish (Complete with TW1 battery)	1	8.95	5.53
[redacted]	Radar-Lamp, Copper finish (Complete with TW1 battery)	1	8.95	5.53
[redacted]	Radar Bearcat (Focusing Lantern), Red and plated finish (Complete with TW1 battery)	1	6.95	4.34

*In unit package.

Buss Fuses and Holders



INDICATING FUSETRON FUSES

Similar to FNM types. Indicating pin extends from fuse when fuse blows. Use in signal fuse block or HPC-C fuseholder (larger than 10 amps. units cannot be used in HPC-C). U/L Approved in 0-2½ amp. sizes. For 125 volts.

Buss No.	Amperes	Net Price For	
		Five	100
FNA	1/10, 15/100, 2/10, 3/10, 4/10, ½, 6/10, 8/10, 1, 1⅛, 1¼, 1-4/10, 1-6/10, 1-8/10, 2, 2¼, 2½, 2-8/10, 3, 3-2/10, 3½, 4, 4½, 5, 5-6/10, 6, 6¼, 7, 8, 10	$2.25	$37.50
	12, 15, 20, 25, 30	2.48	41.30

INDICATING FUSES

Fibre tube with silver plated indicating pin which extends when fuse is blown. May be used to actuate a signal when used in HKA fuseholder or Signal Fuse Block. Dual tube construction in sizes larger than 5 amps. (cannot be used in HKA fuseholder). Voltage, 125 volts or less. Size: ¼" x 1¼".

Buss No.	Amperes	Net Price For	
		Five	100
GLD	¾	$1.70	$28.00
	1. 2, 3, 5	1.50	25.00
	8, 10, 12, 15	1.95	32.50

HIGH VOLTAGE FUSES

Designed for protection of circuits up to 20 kw on DC and 30 KVA on AC.

Buss No.	Amperes	V.	Net Price For	
			Five	100
HVA	⅜, ½, ¾, 1, 1½, 2	1000	$0.95	$17.00
HVB	½, ¾, 1, 1½, 2	2500	1.20	22.00
HVJ	1/16, ⅛, ¼, ⅜, ½, ¾, 1, 1½, 2	5000	2.50	45.00
HVL	1/16, ⅛, ¼, ⅜, ½, ¾, 1, 1½, 2	10K	5.00	90.00

"QUICK-BLOWING" 600 V. FUSES

Designed to protect control circuits, fluorescent lighting circuits or similar uses where quick-blowing characteristics are desired. Use HPC-L fuseholder or 3845 fuse block. U/L Approved. (Not Illustrated). Fibre tube 13/32" x 1⅜".

Buss No.	Amperes	Net Price For	
		Five	100
BBS	4/10, ¾, 8/10	$0.79	$13.20
	1, 2, 3, 4, 5	.72	12.00

PANEL MOUNTED FUSEHOLDERS
BAYONET KNOB TYPE

Size terminal held with solder and mechanically. Knob grips fuse tightly; pulls it from holder when knob is removed. Terminals designed to withstand severe service. Molded black phenolic body with flat spot for lock against rotation when used in punched hole; permits use of locking key in drilled holes. May be used in panels up to 5/16" thick. Locking keys available; specify 1/16" or ⅛" length. U/L Approved.

Buss No.	For Fuse Size, In.	Amps.	Volts	Net Price For	
				Five	100
HJM	¼ x 1	5	125	$1.50	$25.00
HKP	¼ x 1¼	15	250	1.50	25.00

SCREW-IN KNOB TYPE

Attaches to panel with screws or rivets; mounts with flange on front side of panel of any thickness; with flange on rear side, panel up to ⅛" thick. Molded black phenolic body with soldered and mechanically held side terminal. Type HPC U/L Approved for 15 amps., 250 volts. Type HPC-L U/L Approved for 5 a., 600 v.

Buss No.	For Fuses	Fuse Size, In.	Net Price For	
			Five	100
HPC	AGU, ABU, BAF, BAN, FNM, MDR, KLM	13/32x1½	$2.25	$37.50
HPC-L	BBS	13/32x1⅜	2.25	37.50
HPC-C	MIN, MIC, FNA	*	2.85	47.50

*Same as HPC but with transparent knob.

HIGH VOLTAGE FUSE BLOCKS

Similar to Fig. A. Bakelite base with alloy plated solder terminals. Two mounting holes: No. 8 screws for models 4528 and 4529; No. 10 screws on 4530.

Buss No.	For Fuse	Size, Inches L. x W. x D.	Net Price For	
			Five	100
4528	HVA	3¾x1 x⅜	$3.90	$ 65.00
4529	HVB	5¼x1 x⅜	5.40	90.00
4530	HVJ	6½x1⅜x½	7.50	125.00

HIGH INTERRUPTING CAPACITY FUSES

Type KTK—For use on circuits as high as 68,000 amps. at 500 volts or less, AC or DC. Glass fibre melamine tubes and sand filler surrounding a silver fuse element. **Amperes:** 1/10, ⅛, 2/10, ¼, 3/10, ½, ¾, 1, 1½, 2, 3, 4, 5, 6, 8, 10, 15, 20, 25, or 30.

Lot of 5, Net.....**$5.00** Lot of 100, Net.**$90.00**

LAMP-INDICATING BAYONET TYPE

Transparent bayonet knob with indicating light. Molded phenolic body brown for HKR type, black for HKL and HKL-X types. Side terminals held mechanically as well as soldered (also end terminals on HKL and HKL-X). HKR end terminals held mechanically and have ⅛" outward movement when fuse is inserted. Locking slugs available on request without extra charge, 1/16" size. Models HKL and HKL-X are for Neon Lamps, have voltage rating of 100 to 250, and are rated 220,000 Lamp resistor ohms. Model HKL-X has parallel flat-sided knob for positive finger grip. Model HKR is for use with incandescent lamps, rated 24 to 32 volts, and 330 Lamp resistor ohms.

Buss No.	Fuse Size, Inches	Amps.	Knob Color	Net Price For	
				Five	100
HKL	¼ x 1¼	20	Clear	$ 6.45	$107.50
HKL-X	¼ x 1¼	20	Clear	6.45	107.50
HKR	¼ x 1¼	20	Amber	10.50	175.00

LAMP-INDICATING, SIGNAL-ACTIVATING TYPE

When used with GLD fuses in ratings of ¾ to 5 amps., provides simultaneous lamp and external signal indication when the fuse blows. Extension pin of fuse, on blowing, completes a circuit through the knob to indicating lamp of holder and an external signal (to a distant lamp or an audible alarm or relay). Current provided for signaling is 28 volts, .040 ampere. Transparent amber knob. Holder body is molded brown phenolic. Designed for use on circuits where load is 125 volts. Fits panels up to ⅛" thick. Flat area on threaded section to prevent rotation, or permit use of a 1/16" locking slug in a drilled hole (slug available, free)

Buss No. HKA—Net Each..................**$2.82**

Lot of 10, Net..........................**$23.50**

IN-THE-LINE FUSEHOLDERS

Bayonet knob with metal holding ears. Center drilled contacts ready to be staked to ends of wire. Designed to take No. 18 to 22 wire, or No. 14 to 16 wire. **Specify.**

Buss No.	Fuse Size, Inches	Max. Volts	Max. Amps.	Net Price For	
				Five	100
HHJ	¼ x 1¼	250	15	$0.75	$12.50
HHI	¼ x 1 or 1 1/16	250	15	.75	12.50
HHH	¼ x ⅞	250	15	.75	12.50
HIG	¼ x ¾	250	15	.75	12.50
HIF	¼ x ⅝	250	15	.75	12.50

FUSEHOLDER ASSEMBLY WITH FUSE

Includes fuse and one of the standard holders listed above with 19" loop of #14 wire staked and soldered to terminals. Spring nut supplied for panel mounting

Buss No.	Components Holder and Fuse Nos.	Net Price For	
		Five	100
HRJ	HHJ with SFE 20	$1.50	$25.00
HRI	HHI with SFE 14	1.50	25.00
HRH	HHH with SFE 9	1.50	25.00
HRG	HIG with SFE 6	1.50	25.00
HRF	HIF with SFE 4	1.50	25.00

TWIN CLIPS FOR ¼" FUSES

Eliminates cutting and soldering pigtails. Snap clip onto blown fuse, and new fuse into upper portion of clip.

Buss No. 4121—Lot of 5, Net......................**58c**

Lot of 100, Net...................................**$9.50**

¼" SPRING-TYPE FUSE CLIPS

Solid bronze, one-piece structure for ¼" fuses. Albaloy plated for corrosion resistance. No. 4051 has solder terminal. (*) Length of contact surface.

Buss No.	Mtg. Hole Size, Ins.	Size, Inches *L. x W. x H.	Net Price For	
			Five	100
4548	.130-.135	.250 x .335 x .430	8c	$1.30
4051	.130-.135	¼ x 21/64 x 27/64	12c	2.00

FUSE BLOCKS

Bakelite bases, 17/64" high. Molded (Nos. 3794, 3795, 4393, 4405, 4520, 4574) have counterbored holes for #6 screws, rivets. Laminated have countersunk holes for #6 flathead screws.

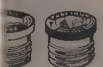
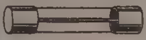
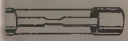
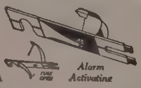
Buss No.	Terminals	Base Size, Inches	Fig.	Net Price For	
				Five	100
4520*	Solder 1-pole	.500 x 1.375	A	$0.60	$10.00
4485*	Solder 2-pole	1.000 x 1.250	A	1.20	20.00
4405†	Solder 1-pole	.500 x 1.625	A	.60	10.00
4408†	Solder 2-pole	1.000 x 1.625	A	1.20	20.00
4514*	Screw 1-pole	.750 x 2.187	B	1.30	21.50
4524*	Screw 2-pole	1.062 x 2.187	B	2.60	43.00
4512†	Screw 1-pole	.750 x 2.187	B	1.30	21.50
4522†	Screw 2-pole	1.062 x 2.187	B	2.60	43.00
4515‡	Screw 1-pole	.750 x 2.562	B	1.95	32.50
4525‡	Screw 2-pole	1.312 x 2.562	B	3.90	65.00
4393*	Spare block	.500 x 1.375	C	.60	10.00
4574†	Spare block	.500 x 1.625	C	.60	10.00

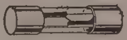
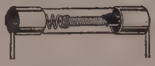
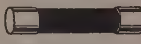
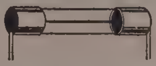
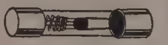
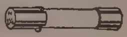
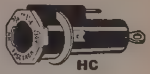
For Fuses: *¼" x 1". †¼" x 1¼". ‡13/32" x 1½".

POLARIZED BLOCKS FOR SILICON RECTIFIERS

3794	Solder 1-pole	1.375 x .500	A	$0.75	$12.50
3795	Solder 2-pole	1.375 x 1.000	D	1.50	25.00

uss Fuses and Fusetron® Fuses

CLEAR WINDOW PLUG FUSES

kproof—insulated with porcelain-like voltage power lines. Top cap protects rs from shock and cuts. Always fit olders. U/L approved.

Type "W" Amperes	Net Price For Five	100
6, 8	$0.31	$5.60
5, 20, 25, 30	.27	4.95

FUSETRON® PLUG FUSES

-delay fuses recommended by N.E. . Won't blow under motor-starting or current surges, yet provide full protection against heavy currents or short its. For voltages up to 125 volts. approved.

Type "T" Amperes	Net Price For Four	100
½, 3½, 4, 5, 6½, 8, 12, 14	$0.53	$12.00
0, 25, 30	.28	6.25

GRASSHOPPER FUSES

ures alarm activating and signal indi-g. Length: 1⁴³⁄₆₄", except 35D (1⅝"), (1⁶³⁄₆₄").

Amp.	Blowing Time Amp.	Sec.	Net Price For Five	100
1⅓ #	2	90	$0.85	$15.00
1⅓ **	2	90	.85	15.00
2**	3	180	.85	15.00
2#	3	180	.85	15.00
1⅓ **	2	90	1.65	30.00
3**	4	300	.90	16.00
½ #	¾	9	.85	15.00
3**	4½	300	.85	15.00
5**	6½	90	.85	15.00
½ #	¾	90	1.20	22.00
1⅓ #	2	180	1.65	30.00
2#	3	180	1.65	30.00
3**	4½	300	1.50	27.00
5**	6½	300	1.50	27.00
¾ #	1⅛	90	1.05	19.00
18/100#	.270	90	1.05	19.00
¼ #	.375	90	1.20	22.00
65/100#	1.1	180	1.20	22.00

: *To 90, †90-160, ‡90-150, §to 160.
nting Screw: #No. 10, **No. 6.

FAST ACTING FUSES

1" glass tube. Carry 100%, open at % in 5 seconds. 1/500 to 1/32 amp. sizes bridge construction; all others ght-through element. U/L approved.

Amperes	Volts	Net Price For Five	100
1/500	250	$3.60	$60.00
1/200	250	1.50	25.00
1/100	250	1.35	22.50
1/32	250	1.20	20.00
1/16	250	.80	13.50
1/8	250	.60	10.00
¼, ⅜, ½	250	.40	6.50
3/4	125	.40	6.50
1, 1½, 2, 3, 4	125	.24	4.00
5	125	.15	2.50

FAST ACTING FUSES

1¼" glass tube. Carry 110%, open at % in 1 hour or less. 1/500 to 2 amp. will open at 200% in 5 seconds or 1/500 to 1/32 amp. have bridge con-tion; all others straight-through ele-t. U/L approved.

1/500	250	$3.60	$60.00
1/200	250	1.50	25.00
1/100	250	1.35	22.50
1/32	250	1.20	20.00
1/16	250	.80	13.50
1/8, 15/100, 175/1000, 3/16	250	.60	10.00
¼, 3/10, 3/8, ½, ¾	250	.40	6.50
1, 1½, 2	250	.24	4.00
3	250	.21	3.50
4, 5, 6	250	.30	5.00
4	32*	.21	3.50
5, 6, 7½, 8, 10, 15	32*	.15	2.50
25, 30	32*	.18	3.00

t U/L listed.

MIDGET TYPE FUSES

o 15 amp. size U/L approved.

1, 3, 6, 10, 15, 20, 25, 30	250	$0.40	$6.63

CERAMIC TUBE FUSES

High interrupting capacity for use on circuit delivering as high as 25,000 amps. at 125 v., or 10,000 amps. at 250 v. ¼" x 1¼". Carry 110%, open at 135% in 1 hour. Up to 15 amp. size U/L approved.

Buss No.	Amperes	Volts	Net Price For Five	100
ABC	¼	250	$0.55	$ 9.00
ABC	1, 2, 3, 5, 6, 8, 10, 12, 15, 20	250	.50	8.50
ABC	25, 30	125	.60	10.00

FUSETRON® GLASS TUBE FUSES

¼" x 1¼", dual-element slow-blowing type. Fuse link operates only on very high overloads or short-circuits; thermal cutout functions on low overloads (cannot operate quickly on any load, thus providing long time-lag). Carry 110%, open at 135% in 1 hour. MDL 1/100 to 2-8/10 amp. and MDX 3 to 7 amp. sizes U/L approved. MDL type has longer time-lag than MDX type.

MDL	1/100, 1/32	250	$1.10	$18.00
MDL	1/16, 1/10, ⅛, 15/100, 175/1000, 3/16, 2/10, ¼, 3/10, ⅜, 4/10, ½, 6/10, 7/10, ¾, 8/10, 1	250	.80	13.50
MDX	1¼, 1½, 1-6/10, 2	250	.90	15.00
MDL	1¼, 1½, 1-6/10, 2	125	.75	12.50
MDL	2½, 2-8/10	125	.60	10.00
MDX	3, 3-2/10	125	.60	10.00
MDX	4, 5, 6¼, 7	125	.70	11.50
MDL	3, 3-2/10, 4, 5, 6¼, 8, 10, 15, 20, 25, 30	32	.60	10.00

FUSETRON® FIBRE TUBE FUSES

Dual-element slow-blowing type, ¹³⁄₃₂" x 1½" overall. Fuse link operates only on very high overloads or short circuits; thermal cutout functions on low overloads (cannot operate quickly on any overload, thus providing longer time lag). Carry 110%, open at 135% in 1 hour. 125 and 250 volt sizes U/L approved.

FNM	1/10, 15/100, 2/10, 3/10, 4/10, ½, 6/10, 8/10, 1, 1⅛, 1¼, 1-4/10, 1-6/10, 1-8/10, 2, 2¼, 2½, 2-8/10, 3, 3-2/10, 3½, 4, 4½, 5, 5-6/10, 6¼, 7, 8, 9, 10	250	$1.19	$19.75
FNM	12, 15	125	1.19	19.75
FNM	20, 25, 30	32	1.19	19.75

GLASS TUBE FUSES

¼" x ⅝". Carry 110%, open at 135% in 1 hour.

AGA	1, 1½, 2	32	$0.24	$4.00
AGA	3	32	.21	3.50
AGA	5, 6, 7½, 10, 15, 20	32	.18	3.00
AGA	25, 30	32	.18	3.00

SFE STANDARD FUSES

Different amperages are different lengths, making it impossible to over-fuse. Glass tube, ¼" dia. Carry 100%, open at 125% in ½ hour. Made to SAE specifications and U/L approved. 32 volts or less.

SFE	4	⅝	$0.17	$2.80
SFE	6	¾	.17	2.80
SFE	7½	⅞	.15	2.50
SFE	9	⅞	.15	2.50
SFE	14	1¹⁄₁₆	.14	2.30
SFE	20	1¼	.14	2.30
SFE	30	1⁷⁄₁₆	.18	3.00

FUSETRON® PIG-TAIL FUSES

¼" x 1¼", #20 tinned wire leads, 1½". 1/100 to 2-8/10 same as MDL type; 3 to 7 amps. same as MDX type. U/L approved.

Buss No.	Amperes	Volts	Net Price For Five	100
MDV	1/100, 1/32	250	$1.35	$22.50
MDV	1/16, 1/10, ⅛, 15/100, 175/1000, 3/16, 2/10, ¼, 3/10, ⅜, 4/10, ½, 6/10, ¾, 8/10, 1	250	1.03	17.00
MDV	1¼, 1½, 1-6/10, 2	125	.95	16.00
MDV	2½, 2-8/10, 3, 3-2/10, 4, 5, 6¼, 7	125	.80	13.50

PIG-TAIL FUSES

¼" x 1¼" glass tube with 1½" leads of #20 tinned wire. Carry 110%, open 135% in 1 hour. U/L approved.

Buss No.	Amperes	Volts	Net Price For Five	100
GJV	1/16	250	$1.00	$16.50
GJV	⅛	250	.75	22.50
GJV	¼, ⅜, ½, ¾	250	.60	10.00
GJV	1, 1½, 2, 3	250	.45	7.50
GJV	4, 5, 6	250	.48	8.00

TYPE C AND N FUSES, HOLDERS

Matched glass fuses and fuseholders for specific size ranges. **Type N** fuses are dual-element time-delay or slow-blowing type. 0 to 1¼ amp. sizes, ¼" x 1¼"; 1-3/10 to 7 amp. sizes, ¼" x 1⁷⁄₁₆". **Type C** fuses are single-element quick-blowing type. 0 to 3½ amp. sizes, ¼" x 1¹⁄₁₆"; 3-6/10 to 10 amp. sizes, ¼" x 1¼". Holders rated at 250 volts.

TYPE N FUSES

Amperes	Holder No. HN-	Volts	Net Price For Five	100
1/100, 1/32	0 to 3/10	250	$1.20	$20.00
1/16, 1/10 15/100, 2/10, ¼, 3/10		250	.85	14.00
4/10	3/10 to ½	250	.85	14.00
½	3/10 to ½	250	.85	14.00
6/10	½ to ¾	250	.85	14.00
7/10, ¾	½ to ¾	250	.85	14.00
8/10, 1	¾ to 1¼	250	.85	14.00
1¼	¾ to 1¼	250	.80	13.00
1-6/10	1-3/10 to 1¾	125	.80	13.00
1¾		125	.80	13.00
2	1¾ to 2½	125	.80	13.00
2½	1¾ to 2½	125	.70	12.00
2-8/10	2½ to 3½	125	.70	12.00
3-2/10	2½ to 3½	125	.70	12.00
3½	2½ to 3½	125	.70	12.00
4	3½ to 5	125	.70	12.00
5	3½ to 5	125	.70	12.00
6¼	5 to 7	125	.70	12.00
7	5 to 7	125	.70	12.00

TYPE C FUSES

Amperes	Holder No. HC-	Volts	Net Price For Five	100
1/32	0 to 3/10	250	$1.25	$21.00
1/16	0 to 3/10	250	.80	13.50
⅛, 3/16	0 to 3/10	250	.65	10.50
¼	0 to 3/10	250	.50	8.00
3/10	0 to 3/10	250	.50	8.00
⅜	3/10 to ½	250	.50	8.00
½	3/10 to ½	250	.50	8.00
¾	½ to ¾	250	.50	8.00
1	¾ to 1¼	250	.28	4.50
1¼	¾ to 1¼	250	.28	4.50
1½	1¼ to 1¾	250	.28	4.50
1¾	1¼ to 1¾	250	.28	4.50
2	1¾ to 2½	250	.28	4.50
2½	1¾ to 2½	250	.28	4.50
3	2½ to 3½	250	.28	4.50
3½	2½ to 3½	250	.35	6.00
4	3-6/10 to 5	250	.35	6.00
5	3-6/10 to 5	250	.35	6.00
6	5 to 7	250	.35	6.00
7	5 to 7	250	.35	6.00
8	7 to 10	250	.50	8.50
10	7 to 10	250	.55	9.00

Type HC and Type HN Fuse Holders—All sizes (specify). Net for 5........**60c**
Net for 100........................**$10.00**

LITTELFUSE Fuses

SFE AUTO FUSES

TYPE 3AG MEDIUM ACTING FUSES

Series 307000—Made to SAE specifications; graduated in length according to current rating. Special grooved element, locked-cap assembly is center blowing; strengthened against shocks and vibrations. Dia., ¼″. U/L Approved.

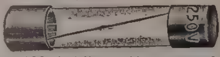
L. F. No.	Amps Rating	Length	Max. Volts	5 For	100 For
307004	4	⅝″	32	17c	$2.75
307006	6	¾″	32	17c	2.75
30707.5	7.5	⅞″	32	17c	2.75
307009	9	⅞″	32	15c	2.50
307014	14	1 1/16″	32	14c	2.25
307020	20	1¼″	32	14c	2.25
307030	30	1 7/16″	32	18c	3.00

TYPE 1AG QUICK-MEDIUM ACTING FUSES

Series 301000—For low voltage (32 volts or less) uses in radios, auto radios, cigar lighters, etc. Straight fuse element in center of fuse with visible open link. Length, ⅝″; dia., ¼″.

L. F. No.	Amps	5 For	100 For	L. F. No.	Amps	5 For	100 For
301001	1	24c	$4.00	301010	10	18c	$3.00
301002	2	24c	4.00	301015	15	18c	3.00
301003	3	21c	3.50	301020	20	18c	3.00
301005	5	18c	3.00	301025	25	18c	3.00
301006	6	18c	3.00	301030	30	18c	3.00
30107.5	7½	18c	3.00				

TYPE 3AG AND 3AB FUSES



Series 312000—3AG, quick acting, low time lag. Metal cap. Diagonal element for accurate alignment calibration. Length, 1¼″; dia., ¼″. Shipping Weight per 100, 1½ lbs. U/L Approved.
Series 314000—Smallest U/L Approved fuses. Steatite enclosed, arc-quenching powder filled. Medium time lag. 1¼″ x ¼″ dia. U/L Approved through 15 amps.

L. F. No.	Amps	5 For	100 For	L. F. No.	Amps	5 For	100 For
312.062	1/16	60c	$10.00	312004	4	30c	$ 5.00
312.125	⅛	60c	10.00	312005	5	30c	5.00
312.150	15/100	60c	10.00	312006	6	30c	5.00
312.175	.175	60c	10.00	312008*	8	45c	7.50
312.187	3/16	60c	10.00	314001	1	51c	8.50
312.250	¼	39c	6.50	314002	2	51c	8.50
312.300	3/10	39c	6.50	314003	3	51c	8.50
312.375	⅜	39c	6.50	314005	5	51c	8.50
312.500	½	39c	6.50	314008	8	51c	8.50
312.750	¾	39c	6.50	314010	10	51c	8.50
312001	1	24c	4.00	314012	12	51c	8.50
31201.5	1½	24c	4.00	314015	15	51c	8.50
312002	2	24c	4.00	314020	20	51c	8.50
312003	3	21c	3.50	314030*	30	60c	10.00

*125 volts, max.; all others, 250 volts, max.

TYPE 3AG SLO-BLO FUSES

Series 313000—Slo-Blo fuses with high time lag for circuits with equipment having high inductive or capacitative surges, heavy starting currents and intermittent-duty circuits. Anti-fatigue construction, compound element with spring and resistor. U/L Approved through 5 amps.

L. F. No.	Amp.	5 For	100 For	L. F. No.	Amp.	5 For	100 For
313.010	1/100	$1.08	$18.00	313001	1	81c	$13.50
313.032	1/32	1.08	18.00	31301.2	1-2/10	75c	12.50
313.062	1/16	.81	13.50	3131.25	1¼	75c	12.50
313.100	1/10	.81	13.50	31301.5	1½	75c	12.50
313.125	⅛	.81	13.50	31301.6	1-6/10	75c	12.50
313.150	15/100	.81	13.50	313002	2	75c	12.50
313.175	.175	.81	13.50	31302.5	2½	60c	10.00
313.187	3/16	.81	13.50	313003	3	60c	10.00
313.200	2/10	.81	13.50	31303.2	3-2/10	60c	10.00
313.250	1/4	.81	13.50	313004	4	60c	10.00
313.300	3/10	.81	13.50	313005	5	60c	10.00
313.375	⅜	.81	13.50	3136.25#	6¼	60c	10.00
313.400	4/10	.81	13.50	313008#	8	60c	10.00
313.500	1/2	.81	13.50	313010#	10	60c	10.00
313.600	6/10	.81	13.50	313015#	15	60c	10.00
313.700	7/10	.81	13.50	313020#	20	60c	10.00
313.750	3/4	.81	13.50	313025	25	60c	10.00
313.800	8/10	.81	13.50	313030	30	60c	10.00

#32 volts, max.; all others, 125 volts, max.

TYPE 4AG SLO-BLO FUSES

Series 413000—Meet aircraft vibration requirements. High time lag for extra protection against overloads. Spring-and-link element takes up thermal expansion, eliminates crystallization, etc., yet blows quickly on short circuits. Length, 1¼″; dia., 9/32″. Spring-and-link construction through 5 amps.

L. F. No.	Amps	5 For	100 For	L. F. No.	Amps	5 For	100 For
413.100	1/10	$1.05	$17.50	413002	2	$1.05	$17.50
413.150	15/100	1.05	17.50	41302.5	2½	.81	13.50
413.200	2/10	1.05	17.50	413003	3	.81	13.50
413.250	¼	1.05	17.50	41303.2	3-2/10	.81	13.50
413.300	3/10	1.05	17.50	413004	4*	.81	13.50
413.400	4/10	1.05	17.50	413005	5*	.81	13.50
413.500	½	1.05	17.50	4136.25	6¼*	.81	13.50
413.600	6/10	1.05	17.50	413008	8*	.81	13.50
413.750	¾	1.05	17.50	413010	10*	.81	13.50
413.800	8/10	1.05	17.50	413015	15*	.81	13.50
413001	1	1.05	17.50	413020	20*	.81	13.50
4131.25	1¼	1.05	17.50	413025	25*	.81	13.50
41301.6	1-6/10	1.05	17.50	413030	30*	.81	13.50

*32 volts, max.; all others, 250 volts, max.

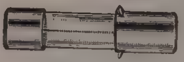
TYPE 5AG SLO-BLO FUSES

Series 513000—Withstand excessive current surges without blowing; maximum protection on shorts and overloads. Ideal for aircraft, motors, relays, etc. High time lag; shock and vibration resistant. Length, 1½″; dia., 13/32″.

L. F. No.	Amps	5 For	100 For	L. F. No.	Amps	5 For	100 For
513001	1*	$1.35	$22.50	513015	15	$1.05	$17.50
513002	2*	1.35	22.50	513020	20	1.05	17.50
513003	3*	1.05	17.50	513025	25	1.20	20.00
513005	5	1.05	17.50	513030	30	1.20	20.00
513010	10	1.05	17.50				

*250 volts, max.; all others, 32 volts, max.

LIMITED CURRENT FUSES



Completely eliminates over-fusing by combination of three different fuse lengths and seven different widths of bayonet locking tabs on fuse caps. **Holder data and prices on request.**

TYPE C REGULAR

L. F. No.	Amps	5 For	100 For
332.032	1/32	$1.26	$21.00
332.062	1/16	.63	10.50
332.125	⅛	.63	10.50
332.187	3/16	.63	10.50
332.250	¼	.48	8.00
332.300	3/10	.48	8.00
332.375	⅜	.48	8.00
332.500	½	.48	8.00
332.750	¾	.48	8.00
332001	1	.27	4.50
3321.25	1¼	.27	4.50
33201.5	1½	.27	4.50
3321.75	1¾	.27	4.50
332002	2	.27	4.50
33202.5	2½	.27	4.50
332003	3	.27	4.50
33203.5	3½	.36	6.00
332004	4	.36	6.00
332005	5	.36	6.00
332006	6	.36	6.00
332007	7*	.36	6.00
332008	8*	.51	8.50
332010	10*	.54	9.00

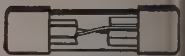
*125 v., max.; others, 250 v., max.

TYPE N SLO-BLO

L. F. No.	Amps	5 For	100 For
333.010	1/100	$1.20	$20.00
333.032	1/32	1.20	20.00
333.062	1/16	.84	14.00
333.100	1/10	.84	14.00
333.150	15/100	.84	14.00
333.200	2/10	.84	14.00
333.250	¼	.84	14.00
333.300	3/10	.84	14.00
333.400	4/10	.84	14.00
333.500	½	.84	14.00
333.600	6/10	.84	14.00
333.750	¾	.84	14.00
333.800	8/10	.84	14.00
333001	1	.84	14.00
3331.25	1¼	.78	13.00
33301.6	1-6/10	.78	13.00
3331.75	1¾	.78	13.00
333002	2	.78	13.00
33302.5	2½	.72	12.00
33302.8	2-8/10	.72	12.00
33303.2	3-2/10	.72	12.00
33303.5	3½	.72	12.00
333004	4	.72	12.00
333005	5	.72	12.00
33336.25	6¼†	.72	12.00
333007	7†	.72	12.00

†32 v., max.; all others, 125 v., max.

AIRCRAFT FUSES



Series 411000—4AG fuses withstand vibrations, shocks and repeated off-and-on demands encountered in aircraft operation. Medium to slow fuses. Overall size: 1¼″ long x 9/32″ diameter.

L. F. No.	Amps	5 For	100 For	L. F. No.	Amps	5 For	100 For
411010	10	45c	$7.50	411025	25	45c	$7.50
411015	15	45c	7.50	411030	30	45c	7.50
411020	20	45c	7.50	411035	35	45c	7.50

Series 511000—Anti-vibration element twisted to 90° angle increases natural vibration period 4 times; stops sympathetic vibration. Replaces 4AG types where conditions are extreme. Rated 32 volts, max. Length, 1½″; dia., 13/32″.

L. F. No.	Amps	5 For	100 For	L. F. No.	Amps	5 For	100 For
511005	5	60c	$10.00	511030	30	60c	$10.00
511010	10	60c	10.00	511035	35	60c	10.00
511015	15	60c	10.00	511040	40	60c	10.00
511020	20	60c	10.00	511050	50	60c	10.00
511025	25	60c	10.00	511060	60	60c	10.00

Series 514000—Type 5AB medium lag, bakelite enclosed shatter-proof fuses. Spring and link construction for sizes under 5 amps; mechanically depolarizing and non-crystallizing features in sizes over 5 amps. Takes excessive vibration and shock. Length, 1½″; dia., 13/32″.

L. F. No.	Amps	5 For	100 For	L. F. No.	Amps	5 For	100 For
514001*	1	90c	$15.00	514020	20	90c	$15.00
514002*	2	90c	15.00	514025	25	90c	15.00
514003*	3	90c	15.00	514030	30	90c	15.00
514005	5	90c	15.00	514035	35	90c	15.00
514010	10	90c	15.00	514040	40	90c	15.00
514015	15	90c	15.00				

Series 414000—Type 4AB medium lag, steatite enclosed shatter-proof fuses with features same as Type 5AB. With unusually long vibration life. Recommended where short circuits are severe (115 v., 400 cps circuits). Length, 1¼″; dia., 9/32″.

L. F. No.	Amps	5 For	100 For	L. F. No.	Amps	5 For	100 For
414001	1*	75c	$12.50	414015	15†	75c	$12.50
414002	2*	75c	12.50	414020	20†	75c	12.50
414003	3*	75c	12.50	414025	25	75c	12.50
414005	5†	75c	12.50	414030	30	75c	12.50
414008	8†	75c	12.50	414035	35	75c	12.50
414010	10†	75c	12.50	414040	40	75c	12.50

32 volts, max. except: *250 v. max. †125 v. max.

TYPE 8AG U/L FUSES

Series 362000—Medium lag for standard NEC blowing specifications (same as for 3AG fuses). Compact for limited space uses. U/L Approved. Length, 1″; dia., ¼″.

L. F. No.	Amps	5 For	100 For	L. F. No.	Amps	5 For	100 For
362.125	⅛	48c	$8.00	362001	1	24c	$4.00
362.250	¼	39c	6.50	36201.5	1½*	24c	4.00
362.375	⅜	39c	6.50	362002	2*	24c	4.00
362.500	½	39c	6.50	362003	3*	24c	4.00
362.750	¾	39c	6.50	362005	5*	15c	2.50

*125 v., max.; all others, 250 v., max.

ITTELFUSE Fuses and Mountings

PE 8AG INSTRUMENT HIGH SPEED FUSES

d Cap Assembly for protection licate test equipment. Glass-en-; 1″ x ¼″ dia., accurately rated, peed action, short time lag. For ;e ratings up to 250 v. AC or DC. For higher voltages use n series **361005**, 32 volt type. Shpg. Wt., pkge. of 100, 12 oz.

o.	Amps	5 For	100 For	L.F.No.	Amps	5 For	100 For
02	1/500	$3.60	$60.00	361.400	4/10	$0.39	$6.50
05	1/200	1.50	25.00	361.500	½	.39	6.50
10	1/100	1.35	22.50	361.750	¾	.39	6.50
31	1/32	1.20	20.00	361001	1	.30	5.00
62	1/16	.81	13.50	36101.5	1½	.30	5.00
00	1/10	.60	10.00	361002	2	.30	5.00
25	⅛	.60	10.00	361003	3	.30	5.00
37	3/16	.60	10.00	361004	4	.30	5.00
00	2/10	.60	10.00	361005	5	.30	5.00
50	¼	.39	6.50	361020	20	.30	5.00
75	⅜	.39	6.50				

TYPE 3AG PIGTAIL TV FUSES

315000—Slo-Blo units withstand heavy surges but are -acting when shorts occur. For 125 volts, max. U/L Approved gh 3.2 amps. Length, 1¼″; dia., ¼″; pigtails, 1½″ long. **318000**—Same, but quick acting; and, for 250 volts, max. Approved through 3 amps.

o.	Amps	5 For	100 For	L.F.No.	Amps	5 For	100 For
10	1/100	$1.35	$22.50	315002	2	$0.96	$16.00
32	1/32	1.35	22.50	31502.5	2½	.81	13.50
62	1/16	1.02	17.00	315003	3	.81	13.50
00	1/10	1.02	17.50	31503.2	3-2/10	.81	13.50
50	15/100	1.02	17.00	315004	4	.81	13.50
37	3/16	1.02	17.00	315005	5	.81	13.50
00	2/10	1.02	17.00	318.062	1/16	.75	12.50
50	¼	1.02	17.00	318.125	⅛	.75	12.50
00	3/10	1.02	17.00	318.250	¼	.60	10.00
75	⅜	1.02	17.00	318.375	⅜	.60	10.00
00	4/10	1.02	17.00	318.500	½	.60	10.00
00	½	1.02	17.00	318.750	¾	.60	10.00
00	6/10	1.02	17.00	318001	1	.45	7.50
50	¾	1.02	17.00	31801.5	1½	.45	7.50
00	8/10	1.02	17.00	318002	2	.45	7.50
1	1	1.02	17.00	318003	3	.45	7.50
25	1¼	.96	16.00	318004	4	.48	8.00
.5	1½	.96	16.00	318005	5	.48	8.00
.6	1-6/10	.96	16.00	318006	6	.48	8.00

STRAIGHT ELEMENT FUSES

417000—Type 4AG medium lag for use where large fuse size irable and vibration is not a factor. Low cost, locked cap con-ion. Length, 1¼″; dia., 9/32″. **Series 517000**—Type 5AG -duty version of above. Used for low voltage field receivers ransmitters. Length, 1½″; dia., 13/32″.

No.	Amps	5 For	100 For	L. F. No.	Amps	5 For	100 For
1*	1	39c	$6.50	517001*	1	48c	$8.00
2*	2	39c	6.50	517002*	2	48c	8.00
3*	3	39c	6.50	517003*	3	48c	8.00
05	5	33c	5.50	517004	4	48c	8.00
10	10	33c	5.50	517005	5	45c	7.50
15	15	33c	5.50	517010	10	45c	7.50
20	20	33c	5.50	517015	15	45c	7.50
25	25	33c	5.50	517020	20	45c	7.50
30	30	33c	5.50	517025	25	45c	7.50
35	35	39c	6.50	517030	30	45c	7.50
40	40	39c	6.50	517050	50	48c	8.00

volts, max.; all others 32 volts, max.

MOUNTINGS FOR SARKES-TARZIAN RECTIFIERS

F. No.	Description	5 For	100 For
9062	Single pole 3/16″ base	$0.66	$11.00
9063	Double pole 3/16″ base	1.35	22.50
9065	Double pole 1/16″ base	.66	11.00
9065-2	Fish paper insulator	.027	.45
9065-3	1/16″ bakelite insulator	.055	.90
9067	Single pole 1/16″ base	.33	5.50
9067-2	Fish paper insulator	.02	.30
9067-3	1/16″ bakelite insulator	.03	.50

155000 SERIES IN-LINE FUSE RETAINER

rdy high impact molded bakelite fuse retainers designed to g in the cable or mount in the chassis. Intended for low voltage ications as in car radios, heaters, spot-lights, clocks, etc. uit breaks when knob is removed for safe examination of fuses. n 19-inch leads. Other leads available on request. **04A** for 4-amp SFE and 1AG. **155006A** for 6-amp SFE. **09A** for 9-amp SFE and 7AG. **155014A** for 14-amp . **155020A** for 20-amp SFE and 3AG. Net Each...... **30c**

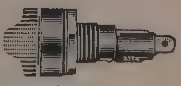
TYPE 094024 SNAP-ON FUSE HOLDER

Just snap replacement fuse in holder and snap other side of holder on burned out pigtail fuse in in set. No soldering or cutting. Supplied less fuses.

Type 094024—Card of 24 holders. Net Price... **$4.32**

Type 094025—Box of 10 holders. Net Price.... **$1.80**

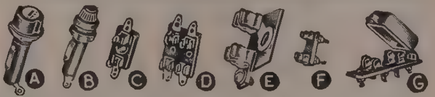
INDICATING FUSE POSTS



Glows when fuse blows. Used with Type 3AG fuses. Patented knob design lights when fuse blows; uses vacuum neon lamp for high visibility. Bayonet lock and double flatted body for easy mounting, quick servicing. Sturdy, black phenolic body. Compact, to fit tight installations. Current rating, 20 amps, max.

L.F. No.	Volts	Knob Color	For Fuse	Net Each
344006	2½-7	Amber	3AG	$2.21
344012	7-16	Amber	3AG	2.21
344024	16-32	Amber	3AG	2.21
344125	90-125	Clear	3AG	1.35
344250	200-250	Clear	3AG	1.35

LITTELFUSE MOUNTINGS—EXTRACTOR POSTS



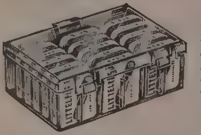
L.F. No.	Fig.	Fits Fuse	Description	Net Ea.
341001	A	3AG-3AB	Screw. Slot—Panel Mount	$0.42
342001	B	3AG-3AB	Finger Knob—Pan. Mount	.42
342003	....	3AG	Miniature—Panel Mount	.36
342006	....	....	Watertight—Panel Mount	2.11
342008	....	3AG	Dust-proof—Panel Mount	.40
342012	....	3AG	Miniature Post	.30
371001	A	8AG	Screw. Slot—Panel Mount	.42
372001	B	8AG	Finger Knob—Pan. Mount	.42
356001	C	3AG-3AB	Single Fuse—Screw Term.	.26
357001	C	3AG-3AB	Single Fuse—Solder Term.	.12
356002	D	2-3AG or 3AB	Double Fuse—Screw Term.	.52
357002	D	2-3AG or 3AB	Double Fuse—Sold. Term.	.24
387001	C	8AG	Single Fuse—Solder Term.	.12
387002	D	2-8AG	Double Fuse—Sold. Term.	.24
383002	E	8AG	Single Fuse—Meter Back	.21
353001	F	3AG-3AB	Single Fuse—Panel Mount	.36
383001	F	8AG	Single Fuse—Panel Mount	.36
351009	G	2-3AG or 3AB	Dble. Fuse—Hinged Cover	.66

LITTELFUSE STANDARD FUSE CLIPS

Fuse clips listed below are standard, available in three types, with ears or fuse stops as illustrated, without ears, or with lug or solder terminal. All three are available in beryllium copper with silver plating or in phosphor bronze with nickel plating.

Fuse Adaptation	Type	Beryllium-Copper		Phosphor-Bronze	
		No.	10 for	No.	10 for
SFE, 3AG, 8AG	Ears	121001	$0.36	101001	$0.15
SFE, 3AG & AB, 8AG	Earless	121002	.36	101002	.15
SFE, 3AG & AB, 8AG	Terminal	121004	.54	101003	.21
4AG, 4AB	Ears	123001	.54	103001	.30
4AG, 4AB	Earless	123002	.54	104002	.30
5AG, Hi-Volt, Midget	Ears	125001	.90	105001	.36
5AG, Hi-Volt, Midget	Earless	125002	.90	105002	.36
N.E.C.-30	Ears	127001	1.20	107001	.48
N.E.C.-30	Earless	127002	1.20	107002	.48
Std. Hi Voltage	Ears	129001	3.00	109001	1.32
Std. Hi Voltage	Earless	129002	3.00	109002	1.32

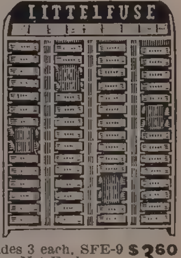
FUSE CADDIES



Hinged, clear plastic box with 18 compartments and 15 boxes containing 5 each of the following fuses: 3AG ¼ a.; 3AG ½ a.; 3AG 1 a.; 3AG 2 a.; 3AG 3 a.; 3AG 5 a.; 3AG ¼ a. SB; 3AG ½ a. SB; 8AG ¼ a.; 8AG ½ a.; N ¼ a. LC; N 1 a. LC; C 2½ a. LC; Emergency Kit. **Type 094037 Fuse Caddy**—Net... **$6.34**

Type 094041 Fuse Caddy—Assortment of 75 LC fuses to cover over 94% of all servicing needs. Three spare compartments. Net Each.................................... **$8.49**

FUSEMASTER RACK ASSORTMENT



Wall-mounting rack with 60 compartments for workshop or store sales. Permits easy identification and selection; with index card of list prices and compartment location. Complete unit includes plastic rack, index, inventory control, pressure-sensitive blank lables, two mount screws and 100 assorted fuses of the most popular types. Fuses supplied include: 35 Type 3AG fuses in ¼, ½, 1, 2, and 5 amp ratings; 40 Type 3AG Slo-Blo in ¼, ½, 1, 2, 3 and 5 amp ratings; 10 Limited Current Type C, 3/10 amp fuses; and, 15 Limited Current Type N fuses in 3/10, 4/10 and ½ amp ratings.

Littelfuse No. 094047 Fuse-master Rack Assortment—Net **$9.69**

Littelfuse No. 094020 Fuse Retainer Assortment—12 Inline fuse retainers (155000 Series, at left) with fuse inserted; mounted on display card. Includes 3 each, SFE-9 and SFE-20 types; 6 each SFE-14 types. Net Each...... **$3.60**

South River Antenna Mounts

BANTAM TOWER ROOF MOUNT

Preassembled mount is self-supporting even during installation. Adjustable feet fit peak or flat roofs. No guys, hooks, clamps or turnbuckles required. Galvanized steel tubing construction. Takes 1¼" O.D. mast.

Model BT-5—Makes 7 ft. installation with 5 ft. mast. Net Each.... $4.35

Model BT-10—Makes 9 ft. installation with 5 ft. mast. Net Each........$5.97

WALL BRACKETS

These brackets have special serrated "U" bolts that accommodate masts up to 1½" O.D. without slipping or turning. They are factory assembled and furnished with all installation hardware.

Model WB-3—3" aluminum bracket, extruded and embossed for extra strength. For homes with small or no eave overhang. Net Each............ $1.32

Model WB-6—6" galvanized steel bracket for small overhang. Net Each....$1.41

Model WB-9—9" galvanized steel bracket with a tubular aluminum tripod leg. See fig. WB-12. Net Ea. $2.04

Model WB-12—12" version. Net..$2.79

Model WB-15—15" version. Net... 3.24

Model WB-18—18" version. Net.. 3.66

Model WB-24 (Not ill.)—24" bracket of heavy gauge galvanized steel with two tripod legs. One-piece construction and 16" spread. Net Each............$4.65

TUBULAR WALL MOUNTS

Similar to WB Series but made of ¾" O.D. hot-dipped, galvanized steel tubing for extra strength. Takes up to 1½" mast. Special serrated "U" bolts hold mast without turning.

Model WM-9—9" mount. Net.... $1.20

Model WM-12—12" mount. Net..$2.40

Model WM-15—15" mount. Net.. 3.15

Model WM-18—18" mount. Net.. 3.51

Model WM-24—24" mount. Net.. 4.23

Model WM-24-B—24" mount with two support legs. Net Each..........$4.50

SNAP-IN TYPE WALL MOUNTS

Snap-in type mast holders, rounded and flared, permit easy mast insertion. Factory assembled and complete with all installation hardware.

Size	Assembled		Unassembled	
	Model	Net Ea.	Model	Net Ea.
6"	SN-6	$1.41	USN-6	$1.32
9"	SN-9	2.04	USN-9	1.95
12"	SN-12	2.79	USN-12	2.49
15"	SN-15	3.24	USN-15	2.79
18"	SN-18	3.66	USN-18	3.39
24"	SN-24	4.65	USN-24	4.41

REVERSE U-BOLT AND CLAMP BRACKETS

Model NT-3—3" bracket of 1¼" wide embossed, galvanized steel. Reverse U-bolt and clamp mast holder for quick installation of mast. Net Each..... 87c

Model NT-4—4" version. Net Each 96c

Model BR-3 (Not ill.)—3" economy model of 1" wide steel stock, galvanized for rust protection. Reverse U-bolt and clamp mast holder. Net Each...... 54c

ADJUSTABLE WALL BRACKETS

Model WABV-12—Adjustable 12" to 19½" bracket is hot-dipped galvanized steel. Packed 2 per set. Net Each.. $4.26

Model WB-3-18A—All aluminum construction. Mounts to eave and wall. Special U-bolts hold masts up to 1½" O.D. without slipping or turning. Complete with installation hardware. Net Each........................ $3.24

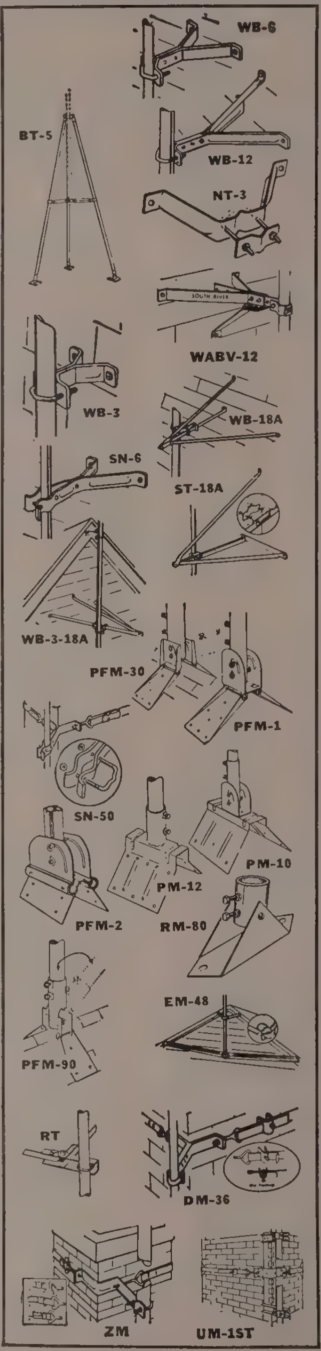
Model WB-18A—All aluminum tubular construction. U-bolt holds masts up to 1½" O.D. without slipping or turning. Complete with installation hardware. Net Each $4.53

Model ST-18A Heavy gauge, embossed steel construction, welded for extra rigidity. U-bolt saddle and sliding plate provide simple mounting of mast at best place to clear eave. Two embossed, galvanized steel legs, cross brace. Complete with installation hardware. Net... $5.55

Model ST-3-18A—Lower bracket same as ST-18A plus rugged 3" steel upper bracket. Hot dipped galvanized; U-bolt and sliding mast clamp. Net Each..... $3.48

ROOF MOUNTS FOR PEAK OR FLAT MOUNTING

All except Models PFM-90 and RM-80 feature Drop-Lock socket permitting mast to be "walked-up" to the vertical, at which point socket drops and locks securely in place. All have adjustable flaps that conform to roof pitch, and a golden irridite finish. All are factory assembled.



501X-59A

Model PFM-2—Extruded aluminum construction. For masts up to 1½" O.D. Net Each.................. $4.47

Model PFM-1—Made of heavy gauge embossed steel. For masts up to 1½" O.D. Net.................. $2.28

Model PFM-1LM—For 2" masts. Net Each........................$2.82

Model PFM-30—Made of heavy gauge steel. For masts up to 1½" O.D. Net Each.................... $1.98

Model PFM-30LM—For 2" masts. Net Each........................$2.61

Model PFM-90—Economically priced steel swivel roof mount. For 1½" O.D. masts. Net Each........... $1.35

Model PFM-90LM—For 2" masts. Net Each........................$1.95

Model RM-80—Swivel-type embossed and plated steel mounting for masts up to 1½" O.D. Net Each........... 75c

Model RM-80LM—For masts up to 2" O.D. Net Each..................$1.41

SADDLE MOUNTS

Model PM-10—Has Drop-Lock feature permitting mast to be "walked-up" to vertical where it drops and locks securely into place. Heavy gauge, galvanized steel construction. Flaps can be bent to conform to pitch. For masts up to 1½" O.D. Factory assembled. Net Each.... $2.91

Model PM-10LM—For masts up to 2" O.D. Net Each..................$3.30

Model PM-12—Similar to Model PM-10 but without Drop-Lock-Walk-up feature. For masts up to 1½" O.D. Net Each.................... $1.77

EAVE MOUNTS

One-piece assembly. Lower bracket made of heavy gauge galvanized steel. Upper bracket of Model EM-48 extends 3" from eave; Model EM-60 extends 4". Both brackets have reverse U-bolt and clamp mast holder for quick installations. Complete with all mounting hardware.

Model EM-30—Galvanized, heavy-gauge angle iron 30" eave mount. Extends 3" from roof lip. Net Each....... $2.73

Model EM-48—48" eave mount. Net Each.................... $3.84

Model EM-60—60" eave mount. Net Each........................$4.80

DUO-MOUNT ANTENNA BASES

Galvanized, riveted alloy steel mount with serrated U-bolts that hold masts ⅝"-1½" O.D. without slipping or turning. Kwik-Klip provides simple means of securing loose banding strap ends. Four eyebolts for even tightening.

Model DM-36—With two 12′ lengths of galvanized strapping and Kwik-Klip. Net Each................ $2.37

Model DM-36ST—With two 12′ lengths of stainless steel strapping and Kwik-Klip. Net Each........................$3.30

SNAP-IN TYPE CHIMNEY MOUNT

Model SN-50—Y-type galv. mount with Snap-In type mast holder and U-bolts for one-hand installation. Two 12"x¾" galv. straps. Holds masts up to 1⅝" O.D. Complete with installation hardware. Net Each.................... $2.10

Model SN-50ST—With stainless steel strapping. Net Each...........$2.88

RATCHET-TYPE CHIMNEY MOUNT

Installation made by pulling the banding around the chimney, threading loose end through slotted shaft and tightening the ratchet. Made of heavy gauge, zinc plated, irridite-finished steel, formed into a channel for extra rigidity and strength. Serrated U-bolts and serrations cut in mounting prevent mast from turning. Complete with two 12′ lengths of strapping.

Model RT—Galvanized strapping. Net Each.................... $2.55

Model RT-ST—Stainless steel strapping. Net Each........................$3.33

CHALLENGER CHIMNEY MOUNT

Embossed, heavy gauge steel mount with golden irridite finish. Two serrated U-bolts hold masts up to 1½" O.D. Furnished with two 12′ lengths of ¾" strapping and all installation hardware.

Model ZM—Galvanized straps. Net Each $1.44

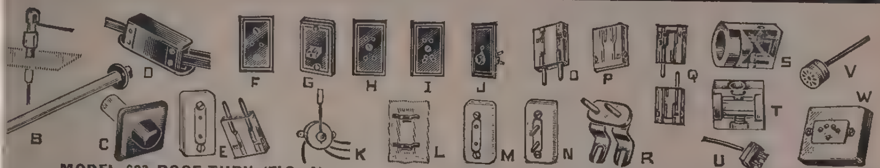
Model ZM-ST—Two 12′ x ¾" stainless steel straps. Net Each..........$2.19

UNI-MOUNT

One-piece heavy gauge, galvanized, embossed, riveted steel mount. Mast holders spaced 18" apart. Aluminum corner guards; Kwik-Klip banding clamp. Complete with installation hardware.

Model UM-1ST—One 12′ stainless steel strap. Net Each........... $4.17

osley TV Antenna Accessories



MODEL 623 ROOF-THRU (FIG. A)

oss polystyrene feed-thru bushing combined with an 8″ x 9″ r flashing provides direct weather-proof roof entrance for ad-in or rotator control cable. For tubular or oval No roof cement needed. Net Each.............. $3.69

623-PK—Above, with one F-1 Single Flush Socket, mount- rdware and mating Transmission Line Plug. Net. .$4.95

624 -Roof-Thru for flat line. Net Each 3.69

624-PK —Same as 623-PK except with 624 unit. Net 4.95

MODEL 625 WALL-THRU (FIG. B)

ls easily and quickly in any wall up to 13″ thick to provide low loss weather-proof wall entrance for TV lead-in or r control cable. Use with any tubular, oval or flat Available in brown or ivory. Net Each $1.23

625-PK —Same as above with 343 and plug. Net. .$1.89

MODEL 626 WALL-FEED (FIG. C)

des weather-proof entrance into attic where line can be ed inside of wall and terminated at a Mosley Flush Socket. d polystyrene plate with weather hood and 2″ polystyrene daptable to thickness of most wall sheathing and . May be cut flush with inside surface. Net Each.. . 80c

626-PK —Above with one 343 TV Lead-In Socket and g Transmission Line Plug. Net Each.............$1.46

EL 902 DUAL MATCH TWO-SET COUPLER (FIG. D)

nizes set interaction and radiation. Housed in sturdy poly- e case. Easy to install outside building in semi-pro- area. Solderless. With mounting screws. Net Each. $1.86

MODEL 912 "TINY-MITE" COUPLER (FIG. E)

ple TV set coupler and convenient plug-in socket combined compact, quickly installed unit. Acts as effective isolating . Will operate two TV sets from one antenna and, under le conditions, several couplers may be utilized to operate up 5 sets. Available in brown or ivory, supplied with solderless nd wood screws. May be installed on inside plate of 625 wall-thru. Net Each.......................... $1.10

USH-MOUNTED TV LEAD-IN SOCKETS (FIG. F)

F-1 Single Flush Socket—For single 300 ohm TV or FM . With mounting machine screws. In brown or Net Each.................................... $1.05

F-1PK —Above, with mating Solderless Transmission Line F-9 mounting brackets and matching screws. Net. .$1.23

FD-1PK—Similar in appearance to F-1PK, but has switch- angement to disconnect wiring system beyond outlet being Prevents "stub-effect". Contacts silver plated, positive type. Brown or ivory polystyrene; with plug and mounting are Net Each $1.32

SM-1 Wall Plate Socket -Similar in appearance to F-1 but ed for use where line cannot be concealed in wall. No pening needed. Brown or ivory. With screws. Net... 85c

SM-1-PK (Fig. G)—Above, with mating Solderless Trans- n Line Socket and mounting wood screws. Net Ea. $1.04

F-11 Dual Flush Socket (Fig. H)—For installations where te high and low channel antennas are used or where it is d to terminate both TV and FM lines in one socket. less. With screws. In brown or ivory. Net Each.... $1.32

F-11PK—Above, with one mating solderless Transmission lug, F-9 mounting brackets and screws. Net Each. .$1.69

ination Lead-in and Rotor Cable Flush Sockets (Fig. I)— zed rotor cable socket plus 300-ohm lead-in socket in one mounted unit. Models F-14 through F-18PK provide one socket; models F114 through F118K provide two. Brown y polystyrene with phosphor bronze contacts. Solderless. nits include F-9 brackets and one each of the necessary plugs. (No. 301).

s F-14 and F-114 (4-wire), **F-15 and F-115**)—Net Each $1.32

s F-14PK and F-114PK (4-wire), **F-15PK and K** (5-wire)—Net Each........................ $2.21

s F-18 and F-118 (8-wire)—Net Each............$1.42

s F-18PK and F-118PK (8-wire)—Net Each...... 2.27

F-10 Combination Socket and 3-Way Switch (Fig. J)— lead-in socket combined with handy, constant impedance . Provides instant change-over to any one of 3 antennas or e used to switch one antenna to 3 different TV sets. type switch, silver contacts. Brown or ivory. Net $2.36

F-10PK—Above, with one mating Solderless Transmission ocket and F-9 mounting brackets. Net Each......$2.77

DEL F-20 3-WAY TV ANTENNA SWITCH (FIG. K)

3-position switch for easy change-over to any one of three nas or for one antenna to three TV sets. Rotary type, silver- er contacts. Polystyrene case has no effect on 300 ohm im- e. Extensions rod (as ill.) supplied for easy access when ed on back of set. Four sections of 300 ohm line factory o switch, and Solderless Transmission Line Splicers d. Brown or ivory. Net Each..... .... $2.36

EL F-9 FLUSH SOCKET MTG. BRACKETS (FIG. L)

ts of 4 accurately punched and tapped heavy gauge steel with necessary machine screws. Requires rectangular pening 1¾″ wide x 4″ long. Net Price............ 22c

EL 343 UNIVERSAL TV LEAD-IN SOCKET (FIG. M)

ounting on baseboard, wall or directly on inside of Model all-Thru. Mounts on metal chassis without shorting. Serves tap or terminal socket and provides constant impedance tion to 300 ohm line when used with Model 301 Line Plug. on molded polystyrene, phosphor bronze contacts. , 1¾″ L., 9/16″ D. Solderless. Brown or ivory. Net Ea.. 50c

343-PK—Model 343 with one univ. line plug. Net...67c

MODEL 344 UNIVERSAL TV LEAD-IN RECEPTACLE (FIG. N)

Similar to Model 343, but designed with male pins. Brown or ivory. With mounting screws. Net Each............... 50c

Model 344-PK—Above, with one universal line plug. Net. .67c

SOLDERLESS CONNECTORS

Mosley solderless multi-wire plugs, sockets and splicers provide fast, efficient and neat connections for TV and FM lead-in lines and rotator control cables. The use of high grade polystyrene and phosphor bronze contacts assures low loss at TV frequencies.and provides excellent mechanical and electrical connection.

Model 301 Universal Transmission Line Plug (**Fig. O**)—Only .02 db loss when mated with Model 311. Use with Flush Sockets and Model 343, as well as Model 500 and all octal tube sockets. Net Each.................................. 19c

Model 311 Universal Transmission Line Socket (**Fig. P**)—Mates with Model 301 Plug, 304 Input Adapter, Model 344 Universal Lead-In Socket. Solderless. Net Each............ 19c

Model 321 Polarized Transmission Line Connector (**Fig. Q**)—Designed to prevent reversal of polarity when connecting or splicing standard 300 ohm line. Use in pairs. Per pair. Net. . 38c

Model 304 Input Adapter (**Fig. R**)—Ideal connector for TV sets, boosters, converters, etc. Attaches to antenna terminal strip at rear of chassis and mates with Model 311 Universal Transmission Line Socket to provide low loss, constant impedance plug-in connection at the set. For 300 ohm impedance. Net Each. 19c

Model 304-PK—Above, with one Model 311 Socket. Net Ea.38c

Model 29-S Tubular to Flat Line Splicer (**Fig. S**)—Solderless, for joining tubular or oval types to standard flat line. Ideal for UHF installation where it is desired to bring more easily hidden flat line into the house. Non-ferrous screws. Net Each.... 13c

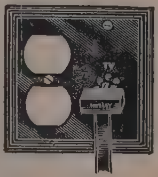
Model 27-S Flat Line Splicer (**Fig. T**)—Handy, inexpensive. For standard flat 300 ohm line. Non-ferrous screws. Net Ea. 11c

ROTATOR PLUGS AND SOCKETS

Connect flat or round wire with a solderless connection. Base sockets mount on wood or metal; raised guide lines. Polystyrene with plated brass pins. Phosphor bronze contacts.

Mosley Type	Figure	Description	Net Each
374	U	Line Plug. For 4-wire cable.	$0.47
375	U	Line Plug. For 5-wire cable.	.51
378	U	Line Plug. For 8-wire cable.	.63
364	V	Line Socket. For 4-wire cable.	.61
365	V	Line Socket. For 5-wire cable.	.65
368	V	Line Socket. For 8-wire cable.	.79
354	W	Base Socket. For 4-wire cable.	.86
354-PK	W	354 with 4-wire line plug.	1.34
355	W	Base Socket. For 5-wire cable.	.95
355-PK	W	355 with 5-wire line plug.	1.46
358	W	Base Socket. For 8-wire cable.	1.10
358-PK	W	358 with 8-wire plug.	1.73

AC/TV WALL-PLATE SOCKETS


AC-1PK

To meet a demand in new home construction and old home remodeling Mosley has introduced a new series of AC/TV Wall-Plate sockets. Nine models are available to meet every TV requirement. They fit standard electrical outlet boxes and provide plug-in connections to single, dual or triple lead-in lines or single or dual lead-in lines in combination with 4, 5 or 8-wire rotor cables. Convenience outlet side of plate fits any standard 115 v. AC double socket. Outlet box and AC double socket not included. Includes the new Mosley No. 303 TV Plug as illustrated. Plug is compact, extends out from socket only 9/16″. Flat 300-ohm line enters at side, eliminating tendency to pull out plug with wire. Middle pin polarizes the plug and prevents accidentally plugging it into the 115-v. outlet. Center pin can be removed for use with standard Mosley 2-pin sockets. Solderless. Complete with TV Plug, plated machine screws, metal barrier for separating AC side of outlet box from TV side and complete instructions. State color wanted, brown or ivory polystyrene.

Mosley No. AC-1PK—(Illustrated). With single 300-ohm lead. Net Each.. $1.18

Mosley No. AC-11PK—With Dual 300-ohm lead. Net. . .$1.57

Mosley No. AC-111PK—With Triple 300-ohm lead. Net .$2.09

Mosley No. AC-14PK—With One 300-ohm lead plus one 4-wire rotor cable outlet. Net Each..........................$2.09

Mosley No. AC-15PK—With one 300-ohm lead plus one 5-wire rotor cable outlet. Net Each..........................$2.09

Mosley No. AC-18PK—With one 300-ohm lead plus one 8-wire rotor cable outlet. Net Each..........................$2.33

Mosley No. AC-114PK—With two 300-ohm leads plus one 4-wire rotor cable outlet. Net Each..........................$2.51

Mosley No. AC-115PK—With two 300-ohm leads plus one 5-wire rotor cable outlet. Net Each..........................$2.60

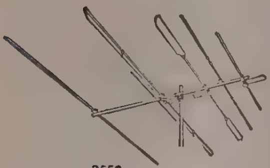
Mosley No. AC-118PK—With two 300-ohm leads plus one 8-wire rotor cable outlet. Net Each..........................$2.75

Mosley No. 303—Three-pin TV Plug. Center pin polarizes to prevent inserting into AC outlet; pin is removable for using plug with standard Mosley 2-pin sockets Solderless. Brown or ivory polystyrene. State choice. Net Each...................... 19c

TV Antennas, Rotators, Wire

TACO TV AND FM ANTENNAS

"TOPLINER" SERIES VHF ANTENNAS


2550

These antennas feature the "Power-Pack", a new antenna matching system that functions on both high and low band channels by combining the energy picked up in the multi-driven dipole systems to give uniform response over the entire VHF spectrum, plus delivering UHF signals to the transmission line with minimum attenuation. The "Power-Pack" is a filter network in which inductance, distributed capacity and conductivity are utilized in a new application of a balanced "T" delay-line. On the low band, the coils act as a straight transmission line, bringing the energy to the terminal points "in-phase". On the high band, the inductive-capacitative effect brings about a delaying action so the signal picked up by the front elements is delayed to arrive at the terminals "in-phase" with the high band signal in the rear driven element.

Taco "Topliner" Model 2540—For black and white plus color reception. Net Each $8.85

Taco "Topliner" Model 2550—Five working elements on low band; 10 on high band. Net Each.......... $11.70

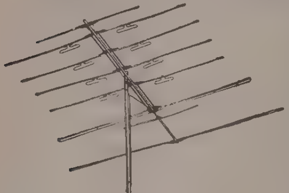
Taco "Topliner" Model 2560— Six working elements on low band; 13 on high band. Net Each $15.45

Taco "Topliner" Model 2570—Eight driven elements on low band; 19 on high band. Net Each.......... $22.05

Taco Model G2502—Close-spaced stacking lines. Net.... $1.08

Taco Model G2503—Wide-spaced stacking lines. Net.... 2.10

"SUPER TRAPPER" BROAD-BAND VHF



A new very high gain all channel VHF Yagi for use in the extreme fringe areas. The Super Trapper incorporates 24 working elements on the high band channels and 7 working elements on the low band channels. It utilizes the Taco Wave-Trap design so successfully introduced in the phenomenal Trapper. No greater gain or more efficient use of aluminum has been attained in a single boom antenna. The Super Trapper is designed to extend fringe reception to reach the areas of weakest signal. It has been completely field tested under all types of fringe area operating conditions. Shows outstanding "staying power" or ability to receive signals under varying propagation conditions with stability. This is due to the new Pentaphase principle used in the Super Trapper, whereby loss of signal due to wave distortion is overcome. Easily installed. Having all the elements in a single plane eliminates one of the major installation problems. Elements are completely factory assembled by means of Taco's spring loaded, quick rig design. Spring loading also contributes to the ability of the antenna to resist wind storms. Springs provide a snubbing action.

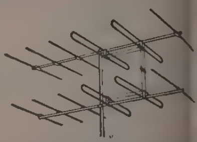
Taco "Super Trapper" Model 1890—Net Each....... $20.70

Taco "Super Trapper" Model 2890—With Auto-Lok brackets. Net Each.......... $20.37

Taco Model G2502—Close-spaced stacking lines. Net.. 1.08

Taco Model G2503—Wide-spaced stacking lines. Net... 2.10

FM ANTENNAS



Taco Model 644B—Single bay, six-element Yagi for weak signal installation. Uni-directional design rejects all signals except ones from station. Packaged completely assembled; merely swing elements into place and they lock automatically. Net.................. $12.12

Taco Model 646—Stacking kits. Net Each....... $1.59

Taco Model 610—Single bay, ten element Yagi provides best reception for extreme fringe areas. Directivity and exceptional gai assembly is streamlined and balanced for best use with rotors Packaged fully assembled; swing-out elements are self-locking. Net Each.............................. $17.55

ALPHA SUBMINIATURE WIRE, CABLE

Used wherever a fine hook-up wire is required for instrumentatio projects, electro-medical apparatus, computors, transistor circuits photo-electric circuits, sub-miniaturization programs, strain gauges, slip ring assemblies. Single or multi-conductor stranded tinned copper; **105° C high temperature vinyl thermoplastic insulation.** When jacketed, a clear vinyl thermoplastic jacket is over tinned copper shield. Available with heavy (double) tinning.

UNSHIELDED SINGLE CONDUCTOR

Conductor			Nominal		Colors‡	Alpha No.	Net Per Spool§	
No.	Size	Strand	Ins.	O.D.			1000′	100′
1	30	7/38	.010″	.032″	1-19	1606	$ 6.87	$0.99
1	28	7/36	.010″	.035″	1-19	1607	6.63	.96
1	26	7/34	.010″	.038″	1-19	1609	6.95	.99
1	24	16/36	.016″	.056″	1-19	1610	8.21	1.13

UNSHIELDED, MULTI-CONDUCTOR, NO JACKET

2	30	7/38	.010″	.061″	2, 3	2606	$16.07	$1.91
3	30	7/38	.010″	.067″	1-3	3606	29.96	3.30
4	30	7/38	.010″	.075″	1-4	4606	42.12	4.52

UNSHIELDED, MULTI-CONDUCTOR, PLASTIC JACKET OVERALL

2	28	7/36	.010″	.120″	2, 3	2607	$25.20	$2.82
3	28	7/36	.010″	.125″	1-3	3607	39.00	4.20
4	28	7/36	.010″	.130″	1-4	4607	49.14	5.22

SHIELDED, SINGLE CONDUCTOR, NO JACKET

Similar description to above, plus tinned copper shield.

Conductor			Nominal		Colors‡	Alpha No.	Net Per Spool	
No.	Size	Strand	Ins.	O.D.			1000′	100′
1	30	7/38	.010″	.055″	1	1332	$36.41	$3.95
1	28	7/36	.010″	.059″	1	1334	37.67	4.07
1	26	7/34	.010″	.063″	1	1336	39.57	4.26
1	24	16/36	.016″	.075″	1	1337	41.31	4.43

SHIELDED, MULTI-CONDUCTOR, NO JACKET

2	24	16/36	016″	.118″	2, 3	2337	$44.22	$4.73
3	24	16/36	.016″	.125″	1-3	3337	54.60	5.76
4	24	16/36	.016″	.145″	1-4	4337	66.30	6.93

SHIELDED, MULTI-CONDUCTOR, PLASTIC JACKET OVERALL

2	28	7/36	.010″	.138″	2, 3	2334	$47.39	$5.04
3	28	7/36	.010″	.146″	1-3	3334	59.28	6.23
4	28	7/36	.010″	.165″	1-4	4334	72.54	7.56

‡Colors—See Table Three. §For striped colors, add to net $1 1 per 1000 ft.

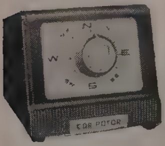
‡TABLE THREE

No.	Color	No.	Color	No.	Color	No.	Color
1	White	6	Blue	11	Wh/Black	16	Wh/Brown
2	Black	7	Brown	12	Wh/Red	17	Wh/Org
3	Red	8	Orange	13	Wh/Green	18	Wh/Gray
4	Green	9	Gray	14	Wh/Yellow	19	Wh/Violet
5	Yellow	10	Violet	15	Wh/Blue		

C-D RADIART ANTENNA ROTATORS

AUTOMATIC ROTATOR AR-22

Completely automatic, heavy-duty rotator that will handle as much as a 150 lb. load with ease. Streamlined, weather-proof design; durable, sturdy construction; heavily reinforced die cast housing. Instantaneously reversible heavy-duty motor. Magnetically released mechanical brakes bring rotator to immediate halt. Precision heavy-duty gears; 12 heavy duty ball bearings in two 6½″ ball bearing races. Reversible clamps will handle masts from ⅞″ to 2″ O.D. Suitable for mast, tower or platform mounting. Handsome, modern design control cabinet with dial that indicates direction antenna is facing, is available in mahogany or blond finish.



C-D R No. AR-22—With mahogany finished case. Net Each.... $33.44

C-D R No. AR-22B Blond case. Net Each.... $34.71

AR-22

ANTENNA ROTATOR TR-2

Similar to AR-22. "Compass Control" cabinet with illuminated dial.

C-D No. TR-2—Net Each........... $29.66

AMATEUR ANTENNA ROTATOR HAM-M

Designed specifically for amateur antennas. Will reliably support and rotate large TV arrays. Automatic locking brake will hold under any wind condition. Electrical power is cut before reaching mechanical end of rotation; illuminated, 1-milliampere meter shows direction without rotating antenna. Heavy-duty motor, brake and indicator operate at less than 24 volts with compensated circuit for component tolerance. Features include improved mast clamps for top-of-tower mounting; stainless steel gears, pinions and mounting hardware insure long life and prevent corrosion. System is complete and ready for installation.

C-D R No. HAM-M Rotator—Net.. $119.50

Alpha Wire, Lacing Cord, Tubing

OLTAGE AND CATHODE RAY WIRE (FIG. A)

ielectric strength. Resistant to heat, flame and moisture. ded—Single conductor stranded tinned copper; special olyethylene insulation. No. 1649 Shielded—Used to mini- F radiation in transmitters, X-Ray and diathermy equip- Single conductor 18 AWG stranded tinned copper; special olyethylene insulation, tinned copper shield overall.

uctor	Nominal		Voltage Rating	Alpha No.	Net Per Spool	
Strand	Insul.	O.D.			1000′	100′
10/30	.047″	.125″	10,000	1641	$ 19.46	$ 1.95
10/30	.063″	.170″	20,000	1642	34.46	3.45
16/30	.095″	.230″	40,000	1645	68.04	7.26
16/30	.095″	.260″	40,000	1649	108.62	11.31

NSULATED TINNED COPPER WIRE (FIG. B)

ire for winding of coils, antennas, point-to-point wiring, , component leads, ground wire. Pure electrolytic solid annealed and tinned for quick soldering. Type B, and -B-33 per MIL-W-3861.

l.	Circ. Mil Area	Nom. O.D.	Alpha Number	Net Per Spool	
				1000′	100′
G	39.75	.006″	299/5	$ 3.15	$ 0.47
G	63.21	.008″	299/4	3.23	.48
G	100.5	.010″	299/3	3.32	.48
G	159.8	.013″	299/2	3.47	.50
G	254.1	.016″	299/1	3.63	.51
G	404.0	.020″	299	3.78	.53
G	642.4	.025″	298	3.95	.54
G	1022	.033″	297	5.21	.68
G	1642	.040″	296	8.19	.98
G	2583	.051″	295	11.03	1.26
G	4107	.065″	286	16.46	1.80
G	6530	.082″	289	24.81	2.63
G	10380	.103″	292	45.68	4.73
G	16510	.129″	292/8	70.88	7.55
G	26250	.162″	292/6	113.40	11.79

BUS BAR (ROUND) (NOT ILLUSTRATED)

ot lengths; 100 lengths per package.

l. Size	Circular Mil Area	Nominal O.D.	Package	
			No.	Net
AWG	4107	.065″	2082	$4.58
AWG	6530	.082″	2080	6.30
AWG	10380	.103″	2078	9.14

RONIC LACING CORDS AND TAPES (FIG. C)

IES: **GE**—Synthetic rubber-like resin formulated with a rcuric compound with non-toxic fungicidal properties. with unique property of "cold-flow", bonding to itself. point in excess of 190° F; softens but will not flow at **MW**—Micro-crystalline wax with melting point above Compounded with a fungicide that does not contain copper uric materials. Meets MIL-T-713A specifications. **AM**— plastic synthetic resin with melting point above 350° F. l with a non-mercuric organic compound for use where a ee" type is required. Non-dusting or flaking dry finish. flon resin used only in impregnation of glass lacing strips; perature exposure up to 500° F. Increases tensile strength glas; provides abrasion-resistant surface.

ROUND TWISTED NYLON CORD

ed in 8 oz. tubes or spools. **Colors:** White and Black.

	Tensile Strength	Finish	Nom. O.D.	Yards Per Lb.	Std. Put-Up	Net Per Lb.	
						White	Black
	10 lbs.	GE	.017″	6,100	Tube	$9.00	$10.50
	13 lbs.	GE	.017″	4,250	Tube	8.63	10.13
	25 lbs.	GE	.025″	1,780	Tube	9.00	10.50
*	32 lbs.	MW	.030″	1,180	Spool	8.70	10.17
	32 lbs.	GE	.030″	1,180	Tube	8.70	10.17
	32 lbs.	AM	.030″	1,180	Spool	8.70	10.17
*	48 lbs.	MW	.035″	750	Spool	8.63	10.13
	48 lbs.	GE	.035″	750	Tube	8.63	10.13
	48 lbs.	AM	.035″	750	Spool	8.63	10.13
	52 lbs.	GE	.040″	750	Tube	8.63	10.13
*	70 lbs.	MW	.050″	560	Spool	8.60	10.08
	70 lbs.	GE	.050″	560	Tube	8.60	10.08
	70 lbs.	AM	.050″	560	Spool	8.60	10.08

MIL-T-713A specifications.

FLAT BRAIDED TAPE

ed to prevent "cold flow". Has a wider contact area with the on. More flexible and easier on user's hands. Recommended ypes of harness work. **Colors:** Black and White. This listing omplete; write for catalog.

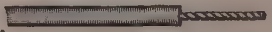
	W. In.	Thk. In.	Tensile Strength	Finish	Std. Spool Put-up	Net Per 1000 Yds.	
						White	Black
			NYLON				
	1/16	.010	30 lbs.	MW	500 yds	$10.32	$11.57
*	3/32	.014	50 lbs.	MW	500 yds	16.10	17.35
	3/32	.014	50 lbs.	GE	500 yds.†	16.10	17.35
	1/4	.014	145 lbs.	MW	200 yds.	29.75	31.00
			DACRON				
	1/16	.010	30 lbs.	MW	500 yds.	$10.32	$11.57
	3/32	.014	50 lbs.	MW	500 yds.	16.10	17.35
	1/4	.014	130 lbs.	MW	200 yds.	29.75	31.00
			TEFLON-FIBERGLAS				
	3/32	.020	140 lbs.	TF	250 yds.	$52.60	......
	1/4	.028	250 lbs.	TF	250 yds.	96.40	......

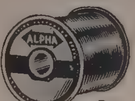
MIL-T-713A specifications. †Tube.

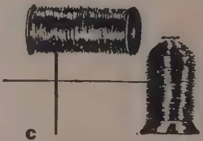
STOCK COLORS

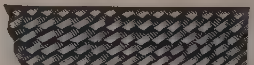
#TABLE ONE

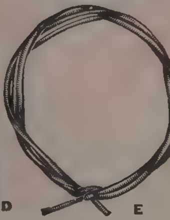
olor	No.	Color	No.	Color	No.	Color	No.	Color
lear	3	Red	5	Green	7	Brown	9	Orange
lack	4	Yellow	6	Blue	8	White		











TINNED COPPER SHIELDING (FIG. D)

For shielding insulated wire and cable, bonding and ground straps. For applications requiring extreme flexibility (pigtails, component leads, connecting moving parts, etc) Very fine, soft annealed tinned copper wires, braided and rolled flat. Strand size, 36.

I.D., In.	Alpha No.	Net, Spool		I.D., In.	Alpha No.	Net Per Spool	
		1000′	100′			1000′	100′
.025	1221	$28.35	$3.14	3/8	1232	$ 94.44	$ 9.83
1/32	1222	29.15	3.21	1/2	1233/2	120.72	12.53
3/64	1223	29.93	3.30	5/8	1233	126.72	13.13
5/32	1224	31.50	3.45	3/4	1234	286.80	29.13
7/64	2229	32.97	3.60	25/32	2234	294.30	29.88
1/8	1229	34.47	3.75	1	1235	303.30	30.86
5/16	1230	40.50	4.35	1 3/8	1239	331.80	33.93
1/4	1231	55.73	5.88	....	....	....	......

ALPHLEX® TUBING AND SLEEVING (FIG. E)

PVC-105 EXTRUDED PLASTIC TUBING

Compounded with non-migratory resinous type plasticizers. Offers high resistance to agents of heat, oil, chemicals, corrosion, fungi and abrasion with no loss in tensile strength; non-flammability; flexibility; heat stability. Conforms to MIL-1-1631-C, ASTM-D876 and ASTM-D922. U/L approved for 105° applications. **Dielectric Strength:** 800 v./mil. **Tensile Strength:** 2500 PSI. **Insulation Resistance:** Over 1,000,000 megs. **Low Temperature Flexibility:** −30°. #Stock colors: See Table One.

PIF-130 PLASTIC IMPREGNATED FIBERGLAS® TUBING

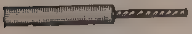
Class B insulation offering advantages of an inorganic fiberglas base sleeving. Non-inflammable, oil and corrosion resistant, flexible and tough. Conforms to MIL-L-3190, NEMA VS1 and ASTM D372. **Dielectric Strength:** 4000 v. **Insulation Resistance:** 1,000,000 megs. **Temperature Rating:** +130° C to −30° C.

Size In.	Nom. I.D. In.	Colors		Alphlex PVC-105 Net Per Spool		Alphlex PIF-130 Net Per Spool	
		PVC-105#	PIF-130†	100′	25′	100′	25′
24	.022	1-9	1-4	$1.59	$ 0.51	$ 4.35	$ 1.20
22	.027	1-9	1-4	1.59	.51	4.65	1.28
20	.034	1-9	1-4	1.62	.53	4.73	1.31
19	.038	1-9	1-4	1.65	.53	4.73	1.31
18	.042	1-9	1-4	1.68	.54	4.88	1.34
17	.047	1-9	1-4	1.70	.56	4.88	1.34
16	.053	1-9	1-4	1.76	.57	5.03	1.38
15	.059	1-9	1-4	1.80	.60	5.10	1.41
14	.066	1-9	1-4	1.88	.59	5.25	1.44
13	.076	1-9	1-4	1.92	.60	5.48	1.50
12	.085	1-9	1-4	2.04	.63	5.63	1.53
11	.095	1-6	1-4	2.10	.65	6.00	1.64
10	.106	1-6	1-4	2.22	.68	6.38	1.73
9	.118	1-6	1-4	2.72	.80	6.68	1.80
8	.133	1-6	1-4	2.81	.83	7.05	1.89
7	.148	1-6	1-4	2.96	.86	7.43	1.98
6	.166	1-6	1-4	3.29	.95	8.03	2.28
5	.186	1-6	1-4	3.48	1.01	8.85	2.34
4	.208	1-6	1-4	3.80	1.08	9.83	2.52
3	.234	1-6	1-4	4.14	1.17	10.95	2.79
2	.263	1-6	1-4	4.49	1.26	12.38	3.15
1	.294	1,2	1,3	4.88	1.35	14.03	3.57
5/16	.312	1,2	.....	6.32	1.71	....	....
0	.330	1,2	1,3	5.31	1.46	16.43	4.17
3/8	.375	1,2	1,3	7.53	2.07	20.40	5.01
7/16	.438	1,2	1,3	8.48	2.33	26.93	6.80
1/2	.500	1,2	1,3	9.53	2.63	35.25	8.97
9/16	.562	1,2	.....	....	3.48	....	....
5/8	.625	1,2	1,3	....	3.60	....	11.24
3/4	.750	1,2	1,3	....	4.73	....	13.70
7/8	.875	1,2	1,3	....	5.33	....	16.53
1	1.000	1,2	1,3	....	6.15	....	19.79
1 1/8	1.125	1,2	.....	....	7.20	....	....
1 1/4	1.250	1,2	.....	....	8.33	....	....
1 3/8	1.375	1,2	.....	....	8.85	....	....
1 1/2	1.500	1,2	.....	....	10.80	....	....
1 3/4	1.750	1,2	.....	....	13.43	....	....
2	2.000	1,2	.....	....	18.08	....	....
2 1/4	2.250	1,2	.....	....	21.30	....	....
2 1/2	2.500	1,2	.....	....	25.13	....	....

†Stock colors: 1—Black; 2—Red; 3—Yellow; 4—Green. (Add size to PVC-105- and/or PIF-130- for order number.)

ALPHA WIRE

Alpha Mil Specification Wire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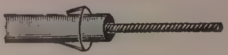
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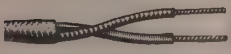
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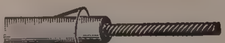
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HOOK-UP WIRE SPECIFICATION MIL-W-16878B

TYPE B UNCOVERED PLASTIC (FIG. A)

Single conductor stranded tinned copper, .010″ vinyl thermoplastic insulation; 100° C. Rated 600 volts.

MIL-W Type	Conductor Size	Conductor Strand	Nom. O.D.	Colors†	Alpha No.††	Net Per Spool 1000′	Net Per Spool 100′
B-32	32	7/40	.028″	1-19	1850	$ 8.55	$1.16
B-30	30	7/38	.032″	1-19	1851	7.25	1.02
B-28	28	7/36	.035″	1-19	1852	7.05	1.01
B-26	26	7/34	.038″	1-19	1853	7.20	1.02
B-24	24	7/32	.043″	1-19	1854	7.64	1.07
B-22	22	7/30	.049″	1-19	1855	8.69	1.17
B-20	20	7/28	.060″	1-19	1856	11.27	1.43
B-18	18	7/26	.071″	1-19	1857	14.03	1.71
B-16	16	19/29	.081″	1-19	1858	17.78	2.09

TYPE B NYLON JACKET (FIG. B)

Same as above, but clear nylon jacket overall; 110° C.

MIL-W Type	Conductor Size	Conductor Strand	Nom. O.D.	Colors†	Alpha No.††	Net Per Spool 1000′	Net Per Spool 100′
B-32	32	7/40	.032″	1-19	1860	$10.65	$1.37
B-30	30	7/38	.036″	1-19	1861	9.68	1.28
B-28	28	7/36	.039″	1-19	1862	9.30	1.23
B-26	26	7/34	.042″	1-19	1863	9.45	1.25
B-24	24	7/32	.047″	1-19	1864	9.89	1.29
B-22	22	7/30	.053″	1-19	1865	11.46	1.44
B-20	20	7/28	.065″	1-19	1866	13.97	1.70
B-18	18	7/26	.075″	1-19	1867	17.55	2.06
B-16	16	19/29	.085″	1-19	1868	21.75	2.48

TYPE C UNCOVERED PLASTIC (FIG. A)

Single conductor stranded tinned copper, .016″ vinyl thermoplastic insulation; 100° C. Rated 1000 volts.

MIL-W Type	Conductor Size	Conductor Strand	Nom. O.D.	Colors#	Alpha No.††	Net Per Spool 1000′	Net Per Spool 100′
C-24	24	7/32	.058″	1-10	1830	$ 8.09	$1.11
C-22	22	7/30	.064″	1-19	1831	9.59	1.26
C-20	20	7/28	.072″	1-19	1832	12.33	1.53
C-18	18	7/26	.082″	1-19	1833	16.34	1.94
C-16	16	19/29	.091″	1-10	1834	20.90	2.39
C-14	14	19/27	.105″	1-10	1835	32.99	3.60

TYPE C NYLON JACKET (FIG. B)

Same as above, but clear nylon jacket overall; 110° C.

MIL-W Type	Conductor Size	Conductor Strand	Nom. O.D.	Colors#	Alpha No.††	Net Per Spool 1000′	Net Per Spool 100′
C-24	24	7/32	.065″	1-10	1840	$11.55	$1.46
C-22	22	7/30	.072″	1-19	1841	13.11	1.61
C-20	20	7/28	.079″	1-19	1842	16.26	1.92
C-18	18	7/26	.090″	1-19	1843	20.58	2.36
C-16	16	19/29	.099″	1-10	1844	26.22	2.93
C-14	14	19/27	.114″	1-10	1845	39.57	4.26

TYPE D UNCOVERED PLASTIC (FIG. A)

Single conductor stranded tinned copper, .032″ vinyl thermoplastic insulation; 100° C. Rated 3000 volts.

MIL-W Type	Conductor Size	Conductor Strand	Nom. O.D.	Colors#	Alpha No.††	Net Per Spool 1000′	Net Per Spool 100′
D-24	24	7/32	.085″	1-10	1870	$ 12.92	$ 1.59
D-22	22	7/30	.110″	1-19	1871	15.44	1.85
D-20	20	7/28	.092″	1-19	1872	18.75	2.18
D-18	18	7/26	.100″	1-19	1873	23.55	2.66
D-16	16	19/29	.116″	1-10	1874	27.72	3.08
D-14	14	19/27	.130″	1-10	1875	41.12	4.41
D-12	12	19/25	.163″	1-10	1876	61.59	6.62
D-10	10	37/25	.182″	1-10	1877	85.61	9.02
D-8	8	133/29	.245″	1-10	1878	167.58	17.21
D-6	6	133/27	.290″	1-10	1879	225.86	23.04

TYPE D NYLON JACKET (FIG. B)

Same as above except clear nylon jacket overall; 110° C.

MIL-W Type	Conductor Size	Conductor Strand	Nom. O.D.	Colors#	Alpha No.††	Net Per Spool 1000′	Net Per Spool 100′
D-24	24	7/32	.089″	1-10	1880	$ 17.57	$ 2.06
D-22	22	7/30	.120″	1-19	1881	21.42	2.45
D-20	20	7/28	.100″	1-19	1882	24.50	2.75
D-18	18	7/26	.110″	1-19	1883	30.24	3.33
D-16	16	19/29	.129″	1-10	1884	36.54	3.96
D-14	14	19/27	.143″	1-10	1885	51.11	5.42
D-12	12	19/25	.180″	1-10	1886	77.42	8.19
D-10	10	37/25	.200″	1-10	1887	105.38	11.00
D-8	8	133/29	.270″	1-10	1888	199.40	20.39
D-6	6	133/27	.315″	1-10	1889	264.60	26.91

††Available with heavy (double) tinning for use with high frequency induction soldering equipment.

SEE FOLLOWING PAGE FOR LISTINGS OF COLORS: *SEE TABLE ONE. #SEE TABLE TWO. †SEE TABLE THREE.

TYPE E EXTRUDED AND SPIRAL WRAPPED TEFLON® (FIG. A)

For guided missiles, telemetering equipment, UHF apparat computers, sub-miniaturized equipment, slip-ring assemblies, a leads to hermetically sealed and potted components. Excell dielectric properties; heat-resistant for continuous service 260° C; tough and flexible to −90° C. Chemically inert. Sing conductor stranded silver-plated copper, extruded or spi wrapped "Teflon" insulation 0.010″ thick. Rated 600 v.

MIL-W Type	Conductor Size	Conductor Strand	Nom. O.D.	Colors†	Spool Extruded Alpha	Spool Extruded 100′	Spool Wrapped Alpha	Spool Wrapped 100′
E-30	30	7/38	.032″	1-10	2851	$ 9.18	2881	$10.
E-28	28	7/36	.036″	1-10	2852	9.38	2882	10.7
E-26	26	7/34	.040″	1-10	2853	9.59	2883	12.1
E-24	24	19/36	.045″	1-10	2854	10.67	2884	13.
E-22	22	19/34	.051″	1-10	2855	12.42	2885	16.
E-20	20	19/32	.059″	1-10	2856	15.93	2886	19.
E-18	18	19/30	.070″	1-10	2857	19.17	2887	23.
E-16	16	19/29	.083″	1-10	2858	25.11	2888	28.
E-14	14	19/27	.097″	1-6	2859	30.51	2889	34.

TEFLON® SHIELDED AND UNSHIELDED CABLES (FIG. C

Each conductor stranded silver-plated copper, Type E, .01 extruded Teflon insulation per MIL-W-16878B. Rated 600 vol When shielded, a closely woven silver-plated copper shield braided over the conductor(s). When braided, a "Teflon" impr nated fiberglas yarn is woven over the conductor(s) or shi Single conductor colors 1-10 per Table Three†. Multi-conduc colors 1-4 per Table Three†.

Conductor Size	Conductor Strand	Outer Cover	Single Conductor Alpha No.	Single Conductor Net 100′	Two Conductor Alpha No.	Two Conductor Net 100′
24	19/36	Shield	2809	$18.23	2809/2	$ 36.
24	19/36	Braid	2810	21.83	2810/2	38.
24	19/36	Shield & Braid	2811	29.03	2811/2	45.
22	19/34	Shield	2812	19.88	2812/2	39.
22	19/34	Braid	2813	23.18	2813/2	41.
22	19/34	Shield & Braid	2814	29.78	2814/2	49.
20	19/32	Shield	2815	23.18	2815/2	47.
20	19/32	Braid	2816	28.13	2816/2	51.
20	19/32	Shield & Braid	2817	34.88	2817/2	56.
			Three Conductor		Four Conduct	
24	19/36	Shield	2809/3	$51.38	2809/4	$ 66.
24	19/36	Braid	2810/3	56.55	2810/4	73.
24	19/36	Shield & Braid	2811/3	68.63	2811/4	78.
22	19/34	Shield	2812/3	54.68	2812/4	74.
22	19/34	Braid	2813/3	61.28	2813/4	77.
22	19/34	Shield & Braid	2814/3	74.48	2814/4	92.
20	19/32	Shield	2815/3	67.88	2815/4	87.
20	19/32	Braid	2816/3	74.63	2816/4	93.
20	19/32	Shield & Braid	2817/3	86.18	2817/4	107.

® Registered trademark of Du Pont.

MIL-W-5086A AND MIL-C-7078A AIRCRAFT HOOK-UP WIRE (FIG. D)

Single conductor, 600 volt insulated. Abrasion, moisture, co heat, flame, fungus, oil and salt water resistant.

UNSHIELDED MIL-W-5086A

Type 1—Single, stranded tinned copper, white plastic insulati nylon jacket overall. **Type 2**—As above, but with nylon lacque glass braid overall.

MIL Type	Spec. Type	Conductor Size	Conductor Strand	Nom. O.D.	Alpha No.	Net Per Spool 1000′	Net Per Spool 100′
AN-22	1	22	19/34	.068″	1381	$ 15.56	$ 1.
AN-20	1	20	19/32	.078″	1382	17.36	2.
AN-18	1	18	19/30	.088″	1383	21.65	2.
AN-16	1	16	19/29	.098″	1384	30.81	3.
AN-14	1	14	19/27	.117″	1385	41.58	4.
AN-12	1	12	19/25	.137″	1386	61.92	6.
AN-10	2	10	49/27	.189″	1387	99.23	10.
AN-8	2	[illegible]	133/29	.240″	1388	162.23	16.
AN-6	2	[illegible]	133/27	.293″	1389	252.00	25.
AN-4	2	4	133/25	.355″	1389/4	363.83	37.
AN-2	2	[illegible]	665/30	.425″	1389/2	563.85	57.
AN-0	2	0	1045/30	.525″	1389/0	866.25	87.
AN-00	2	00	1330/30	.590″	1389/00	1190.70	120.

SHIELDED MIL-C-7078A

Single conductor stranded tinned copper, white plastic insulatio nylon jacket, braided tinned copper shield overall

MIL Type	Spec. Type	Conductor Size	Conductor Strand	Nom. O.D.	Alpha No.	Net Per Spool 1000′	Net Per Spool 100′
AN-22	1	22	19/34	.100″	1391	$ 45.68	$4.
AN-20	1	20	19/32	.110″	1392	50.40	5.
AN-18	1	18	19/30	.125″	1393	55.13	5.
AN-16	1	16	19/29	.140″	1394	72.77	7.5
AN-14	1	14	19/27	.155″	1395	89.46	9.2
AN-12	1	12	19/25	.165″	1396	104.90	10.7

TYPE N NYLON WIRE (FIG. A)

Suitable for low voltage wiring or in equipment where there i heat, flame or moisture problem. The small outside diameter m this wire especially suitable for installations requiring a large n ber of wires in a small space. Single conductor stranded ti copper, thin wall nylon insulation, .006″ thick; 80° C. Rate volts.

MIL-W Type	Conductor Size	Conductor Strand	Nom. O.D.	Colors#	Alpha No.	Net Per Spool 1000′	Net Per Spool 100′
N-32	32	7/40	.021″	1	1810	$ 9.11	$1.2
N-30	30	7/38	.024″	1	1811	8.33	1.1
N-28	28	7/36	.027″	1	1812	7.55	1.0
N-26	26	7/34	.031″	1-10	1813	7.86	1.1
N-24	24	7/32	.036″	1-10	1814	8.79	1.1
N-22	22	7/30	.042″	1-10	1815	10.83	1.3
N-20	20	7/28	.050″	1-10	1816	15.24	1.

Alpha Mil Specification Wire

PLASTIC HOOK-UP WIRE
SPECIFICATION MIL-W-76A

TYPE MW (MEDIUM WALL) PLASTIC (FIG. A)

conductor stranded or solid tinned copper, thermoplastic on. Nominal insulation, .016″. Voltage rating, 1000 v.

STRANDED

Conductor		Nom. O.D.	Colors*	Alpha No.††	Net Per Spool	
Size	Strand				1000′	100′
24	7/32	.059″	1-30	1550	$ 7.04	$1.01
22	7/30	.064″	1-30	1551	8.15	1.11
20	10/30	.073″	1-30	1553	10.68	1.37
18	16/30	.084″	1-30	1555	15.15	1.82
16	26/30	.095″	1-30	1557	22.29	2.54
14	41/30	.110″	1-30	1559	33.62	3.66
12	65/30	.125″	1-30	1560	56.10	5.91

SOLID

22	1	.060″	1-30	1561	$ 6.51	$0.95
20	1	.066″	1-30	1563	8.81	1.19
18	1	.074″	1-30	1565	12.60	1.56
16	1	.083″	1-30.	1567	17.96	2.10

TYPE MW (MEDIUM WALL) PLASTIC, SHIELDED (FIG. D)

onductor stranded tinned copper; thermoplastic insulation, copper shield overall. Nominal insulation, .016″″. Voltage 1000 volts.

Conductor		Nom. O.D.	Colors*	Alpha No.	Net Per Spool	
Size	Strand				1000′	100′
24	7/32	.075″	1-10	1350	$29.43	$3.24
22	7/30	.085″	1-10	1351	30.08	3.32
20	10/30	.095″	1-10	1352	33.24	3.63
18	16/30	.105″	1-10	1353	41.15	4.41
16	26/30	.120″	1-10	1354	47.48	5.06
14	41/30	.135″	1-3	1355	68.84	7.19
12	65/30	.155″	1-3	1356	98.12	10.11

PE MW (MEDIUM WALL) PLASTIC, GLASS BRAID (FIG. B)

onductor stranded tinned copper; thermoplastic insulation, ed glass braid overall. Nominal insulation, .016″. Voltage 1000 volts.

Conductor		Nom. O.D.	Colors#	Alpha No.	Net Per Spool	
Size	Strand				1000′	100′
22	7/30	.080″	1-19	1590	$16.73	$1.98
20	10/30	.090″	1-19	1591	20.36	2.34
18	16/30	.100″	1-19	1592	25.73	2.88
16	26/30	.115″	1-19	1593	35.03	3.81
14	41/30	.125″	1-10	1594	48.60	5.16
12	65/30	.140″	1-10	1595	84.03	8.85

W (MEDIUM WALL) PLASTIC, GLASS BRAID, SHIELDED (FIG. B)

conductor stranded tinned copper, white thermoplastic on, lacquered glass braid, tinned copper shield overall. al insulation .016″. Voltage rating, 1000 v.

Conductor		Nom. O.D.	Colors†	Alpha No.	Net Per Spool	
Size	Strand				1000′	100′
22	7/30	.095″	.....	1361	$ 39.57	$ 4.26
20	10/30	.108″	.....	1362	42.74	4.58
18	16/30	.124″	.....	1363	48.74	5.18
16	26/30	.133″	.....	1364	60.14	6.30
14	41/30	.144″	.....	1365	80.07	8.31
12	65/30	.168″	.....	1366	131.36	13.59

E MW (MEDIUM WALL) PLASTIC, NYLON JACKET (FIG. C)

onductor stranded tinned copper; thermoplastic insulation, acket overall. Nominal insulation, .016″. Voltage rating, lts.

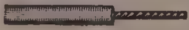
Conductor		Nom. O.D.	Colors†	Alpha No.	Net Per Spool	
Size	Strand				1000′	100′
22	7/30	.075″	1-19	1504	$ 13.08	$1.61
20	10/30	.090″	1-19	1505	17.25	2.03
18	16/30	.103″	1-19	1506	23.16	2.61
16	26/30	.115″	1-19	1507	30.95	3.39
14	41/30	.125″	1-6	1508	44.73	4.77
12	65/30	.140″	1-3	1509	73.56	7.68

TYPE HW (HEAVY WALL) PLASTIC (FIG. A)

onductor stranded tinned copper; heavy wall thermoplastic on. Nominal insulation .032″ for 22-16 cond. sizes; .045″, r sizes. Voltage rating, 2500 v. 22-16 cond. sizes; 600 v., r sizes.

Conductor		Nom. O.D.	Colors†	Alpha No.††	Net Per Spool	
Size	Strand				1000′	100′
22	7/30	.103″	1-10	1571	$ 14.18	$ 1.73
20	10/30	.108″	1-10	1573	17.49	2.04
18	16/30	.120″	1-10	1575	23.48	2.66
16	26/30	.134″	1-3	1577	33.97	3.69
14	41/30	.170″	1-3	1579	55.13	5.97
12	65/30	.190″	1-3	1651	74.10	7.86
10	105/30	.215″	1-3	1653	115.08	11.96
8	133/29	.265″	1-3	1655	201.60	20.63
6	133/27	.310″	1-3	1657	312.15	31.67

*See Table One. #See Table Two. †See Table Three. available with heavy (double) tinning.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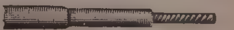
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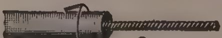
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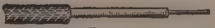
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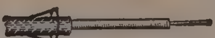
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TYPE MW (MEDIUM WALL) PLASTIC, SHIELDED, NYLON JACKET (FIG. E)

Single conductor stranded tinned copper, white thermoplastic insulation, braided tinned copper shield, clear nylon jacket overall. Nominal insulation .016″. Voltage rating, 1000 v.

Type MW-C	Conductor		Nom. O.D.	Colors#	Alpha No.	Net Per Spool	
	Size	Strand				1000′	100′
22(7)SJ	22	7/30	.100″	.....	1371	$39.57	$4.26
20(10)SJ	20	10/30	.110″	.....	1372	41.15	4.41
18(16)SJ	18	16/30	.120″	.....	1373	50.64	5.37
16(26)SJ	16	26/30	.135″	.....	1374	58.56	6.15

TYPE HW (HEAVY WALL) PLASTIC, GLASS BRAID (FIG. B)

Single conductor stranded tinned copper, heavy wall thermoplastic insulation, lacquered glass braid overall. Nom. insulation .045″. Rated 600 v.

Type HW-C	Conductor		Nom. O.D.	Colors#	Alpha No.	Net Per Spool	
	Size	Strand				1000′	100′
10(105)B	10	105/30	.235″	1-3	1598	$127.82	$13.23
8(133)B	8	133/29	.290″	1-3	1599	225.66	23.01
6(133)B	6	133/27	.340″	1-3	1599/6	309.30	31.46

TYPE LW (LIGHT WALL) PLASTIC (FIG. A)

Single conductor stranded tinned copper; light wall thermoplastic insulation. Nominal insulation, .010″. Voltage rating, 300 v.

Type LW-C	Conductor		Nom. O.D.	Colors†	Alpha No.††	Net Per Spool	
	Size	Strand				1000′	100′
30(7)U	30	7/38	.033″	1-19	1685	$ 7.10	$1.01
28(7)U	28	7/36	.035″	1-19	1686	6.86	.99
26(7)U	26	7/34	.039″	1-19	1687	7.25	1.02
24(7)U	24	7/32	.044″	1-19	1688	7.56	1.05
22(7)U	22	7/30	.049″	1-19	1689	8.52	1.16
20(7)U	20	7/28	.060″	1-19	1690	10.95	1.40

TYPE LW (LIGHT WALL) PLASTIC, NYLON JACKET (FIG. C)

Single conductor stranded tinned copper, light wall thermoplastic insulation, clear nylon jacket overall. Insulation .010″ nominal. Voltage rating, 300 volts.

Type LW-C	Conductor		Nom. O.D.	Colors†	Alpha No.††	Net Per Spool	
	Size	Strand				1000′	100′
30(7)J	30	7/38	.036″	1-19	1675	$ 9.62	$1.26
28(7)J	28	7/36	.039″	1-19	1676	9.30	1.23
26(7)J	26	7/34	.042″	1-19	1677	9.54	1.26
24(7)J	24	7/32	.047″	1-19	1678	9.93	1.29
22(7)J	22	7/30	.053″	1-19	1679	11.67	1.47
20(7)J	20	7/28	.065″	1-19	1680	14.19	1.73

Colors: *See Table One. #See Table Two. †See Table Three. ††Available with heavy (double) tinning.

STOCK COLORS
*TABLE ONE

No.	Color	No.	Color	No.	Color
1	White	11	Tan	21	White/Gray
2	Black	12	Pink	22	White/Violet
3	Red	13	Dark Blue	23	White/Black/Red
4	Green	14	White/Black	24	White/Black/Green
5	Yellow	15	White/Red	25	White/Black/Yellow
6	Lt. Blue	16	White/Green	26	White/Black/Blue
7	Brown	17	White/Yellow	27	White/Black/Brown
8	Orange	18	White/Blue	28	White/Black/Orange
9	Gray	19	White/Brown	29	White/Black/Gray
10	Violet	20	White/Orange	30	White/Black/Violet

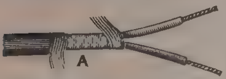
#TABLE TWO

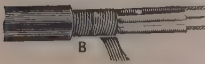
No.	Color	No.	Color	No.	Color
1	White	8	White/Orange	14	Yellow
2	White/Black	9	White/Gray	15	Blue
3	White/Red	10	White/Violet	16	Brown
4	White/Green	11	Black	17	Orange
5	White/Yellow	12	Red	18	Gray
6	White/Blue	13	Green	19	Violet
7	White/Brown	....	....	....	....

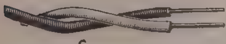
†TABLE THREE

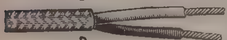
No.	Color	No.	Color	No.	Color
1	White	8	Orange	14	White/Yellow
2	Black	9	Gray	15	White/Blue
3	Red	10	Violet	16	White/Brown
4	Green	11	White/Black	17	White/Orange
5	Yellow	12	White/Red	18	White/Gray
6	Blue	13	White/Green	19	White/Violet
7	Brown	....	....	....	....

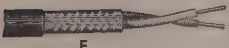
Alpha Electronic Wire, Cable

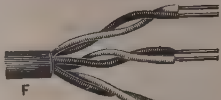


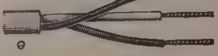


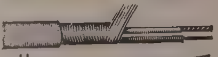


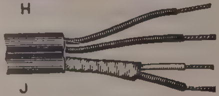












SHIELDED MULTI-CONDUCTOR CABLE

RUBBER JACKET (FIG. A)

For shielded electronic power cable, control circuits, video and audio interconnecting cable, broadcast and heavy duty studio use. Each conductor stranded tinned copper, conductors twisted; rubber insulation, color coded; braided tinned copper shield; cotton wrap, tough black rubber jacket overall.

Conductor			Nominal		Col-ors*	Alpha No.	Net Per Spool	
No.	Size	Strand	Ins.	O.D.			1000′	100′
5	20	26/34	.020″	.340″	1-5	1253	$143.30	$14.78
6	20	26/34	.020″	.365″	1-6	1254	177.18	18.17
6	18	41/34	.020″	.430″	1-6	1254/18	374.46	38.04
7	20	26/34	.020″	.405″	1-7	1255	189.42	19.55
8	20	26/34	.020″	.415″	1-8	1255/8	230.25	23.63
10	20	26/34	.020″	.440″	1-10	1255/10	304.28	31.19

*Colors—See Table One.

UNSHIELDED MULTI-CONDUCTOR CABLE

RUBBER JACKET (FIG. B)

Inter-rack connecting cable, recording and broadcast studio, remote control circuits, PA systems, multiple speaker systems. Each conductor 20 AWG stranded tinned copper, cotton wrap, rubber insulation, color coded, conductors twisted, cushioned with cotton fillers, cotton wrap, tough black rubber jacket overall.

Conductor			Nominal		Col-ors*	Alpha No.	Net Per Spool	
No.	Size	Strand	Ins.	O.D.			1000′	100′
2	20	26/34	.020″	.280″	1-2	1244	$ 75.63	$ 8.01
3	20	26/34	.020″	.285″	1-3	1245	87.48	9.20
4	20	26/34	.020″	.300″	1-4	1246	105.27	10.98
5	20	26/34	.020″	.340″	1-5	1247	125.55	13.01
6	20	26/34	.020″	.360″	1-6	1247/6	155.19	15.98
7	20	26/34	.020″	.380″	1-7	1247/7	196.65	20.19
8	20	26/34	.020″	.400″	1-8	1247/8	209.76	21.72
10	20	26/34	.020″	.440″	1-10	1247/10	251.10	25.86

*Colors—See Table One.

TWISTED PAIR SHIELDED CABLE

For PA and sound systems, transmission line, industrial paging and call systems, recording equipment, broadcast and audio cable, rack and panel wiring, hospital and school sound systems.

WITHOUT PLASTIC JACKET (FIG. D)

Each conductor tinned copper, color coded plastic insulation; twisted; tinned copper shield overall. Colors of conductors: 1—Black, 2—Red.

STRANDED CONDUCTORS

Conductor			Nominal		Alpha No.	Net Per Spool	
No.	Size	Strand	Ins.	O.D.		1000′	100′
2	24	16/36	.016″	.125″	1261	$ 44.10	$ 4.79
2	22	7/30	.016″	.140″	1256/22V	34.26	3.87
2	20	10/30	.016″	.155″	1256V	43.37	4.79
2	18	16/30	.016″	.170″	1259V†	53.09	5.76
2	16	26/30	.020″	.210″	1260V	84.03	8.85
2	14	41/30	.020″	.225″	1260/14	110.25	11.55
2	12	65/30	.025″	.295″	1260/12	198.45	20.37

†22 AWG solid tinned copper ground wire under braided copper shield.

SOLID CONDUCTORS

2	22	1	.016″	.135″	1267/22V	$31.65	$3.54
2	20	1	.016″	.145″	1267V	40.37	4.41
2	18	1	.016″	.170″	1267/18V	46.59	5.12

WITH PLASTIC JACKET (FIG. E)

Each conductor tinned copper; color coded plastic insulation; twisted; braided copper shield; gray vinyl plastic jacket (.020″) overall. Colors of conductors: 1—Black, 2—Red.

STRANDED CONDUCTORS

Conductor			Nominal		Alpha No.	Net Per Spool	
No.	Size	Strand	Ins.	O.D.		1000′	100′
2	22	7/30	.016″	.185″	1736	$40.58	$4.52
2	20	10/30	.016″	.200″	1741	53.70	5.82
2	18	16/30	.016″	.240″	1746	60.50	6.50

SOLID CONDUCTORS

2	22	1	.016″	.175″	1775	$42.81	$4.73
2	20	1	.016″	.210″	1779	37.29	4.19
2	18	1	.016″	.220″	1783	52.95	5.75

TWO- AND THREE-CONDUCTOR UNSHIELDED CABLE

WITHOUT PLASTIC JACKET (FIG. C)

For intercoms, interconnecting, remote control circuits, telephones, telemetering connections. Each conductor solid tinned copper; color coded plastic insulation; twisted. Colors of conductors: 1—Brown, 2—Tan, 3—Gray.

STRANDED CONDUCTORS

Conductor			Nominal		Alpha No.	Net Per Spool	
No.	Size	Strand	Inches	O.D.		1000′	100′
2	22	7/30	.016″	.125″	9169	$16.07	$1.91
3	22	7/30	.016″	.140″	9170	24.11	2.72
2	20	10/30	.016″	.145″	9171	21.42	2.45
3	20	10/30	.016″	.160″	9172	32.13	3.51
2	18	16/30	.016″	.165″	9173	29.46	3.39
3	18	16/30	.016″	.180″	9174	45.68	5.03
2	16	26/30	.016″	.190″	9175	44.18	4.88
3	16	26/30	.016″	.210″	9176	66.32	7.08

SOLID CONDUCTORS

2	22	1	.016″	.100″	9269	$12.60	$1.56
3	22	1	.016″	.115″	9270	18.90	2.19
2	20	1	.016″	.120″	9271	19.85	2.28
3	20	1	.016″	.135″	9272	29.46	3.24
2	18	1	.016″	.145″	9273	25.83	3.03
3	18	1	.016″	.155″	9274	38.28	4.28
2	16	1	.016″	.175″	9275	40.95	4.55
3	16	1	.016″	.190″	9276	55.13	5.97

PLASTIC INTERCOMMUNICATION CABLE (FIG. F)

For balanced intercom systems, annunciators, telephones. Each conductor 22 AWG tinned copper; color coded plastic insulation; twisted into pairs; gray vinyl plastic jacket overall.

SOLID CONDUCTORS

Conductor		Nominal			Alpha No.	Net Per Spool	
Pairs	Strand	Ins.	Jacket	O.D.		1000′	100′
1	1	.010″	.020″	.115″	1300	$ 15.27	$ 2.06
2	1	.010″	.020″	.185″	1302	28.37	3.38
3	1	.010″	.020″	.210″	1304	40.22	4.47
6	1	.010″	.020″	.315″	1307	59.15	6.44
7	1	.010″	.020″	.325″	1307/7	84.14	8.94
9	1	.010″	.020″	.350″	1307/9	87.14	9.24
11	1	.010″	.020″	.360″	1308/11	127.91	13.32
13	1	.010″	.025″	.385″	1309	157.07	16.23
15	1	.010″	.025″	.400″	1309/15	161.81	16.71
16	1	.010″	.025″	.420″	1310	194.43	19.97
27	1	.010″	.035″	.530″	1313	294.71	29.48
31	1	.010″	.035″	.555″	1313/31	460.88	46.35
41	1	.010″	.035″	.630″	1313/41	609.00	61.65
51	1	.010″	.045″	.770″	1314	1002.00	100.95
76	1	.010″	.070″	.970″	1315	1672.50	168.75
101	1	.010″	.080″	1.140″	1315/101	2121.00	213.60

STRANDED CONDUCTORS

1	7/30	.010″	.020″	.145″	1316	$ 21.48	$ 2.60
2	7/30	.010″	.020″	.210″	1317	41.40	4.67
3	7/30	.010″	.020″	.225″	1318	58.37	6.36
4	7/30	.010″	.020″	.260″	1319	73.83	7.91
5	7/30	.010″	.020″	.300″	1320	79.98	8.[illegible]
6	7/30	.010″	.020″	.320″	1322	82.68	9.1[illegible]
9	7/30	.010″	.020″	.355″	1323	122.48	12.86
15	7/30	.010″	.025″	.460″	1327	216.75	22.[illegible]
27	7/30	.010″	.035″	.590″	1329	395.24	39.53

MULTI-CONDUCTOR FLEXIBLE CABLE (FIG. G)

For unbalanced intercom systems, low voltage relay control cable PA systems, signal systems, electronic computers. Each conductor 22 AWG stranded tinned copper; color coded plastic insulation twisted; gray vinyl plastic overall. ♯Colors: See Table Two.

Conductor		Nominal			Alpha No.	Net Per Spool	
No.	Strand	Ins.	Jacket	O.D.		1000′	100′
2	7/30	.010″	.020″	.140″	1172	$ 21.53	$ 2.6[illegible]
3	7/30	.010″	.020″	.145″	1173	22.29	2.[illegible]
4	7/30	.010″	.020	.170″	1174	29.19	3.[illegible]
5	7/30	.010″	.020″	.175″	1175	36.41	4.[illegible]
6	7/30	.010″	.020″	.185″	1176	55.44	6.[illegible]
7	7/30	.010″	.020″	.190″	1177	62.30	6.7[illegible]
8	7/30	.010″	.020″	.200″	1178	67.77	7.3[illegible]
9	7/30	.010″	.020″	.225″	1179	73.61	7.8[illegible]
10	7/30	.010″	.020″	.235″	1180	87.00	9.2[illegible]
12	7/30	.010″	.020″	.255″	1181	115.50	12.0[illegible]

SPIRAL SHIELDED PLASTIC JACKETED (FIG. H)

For PA and sound systems, recording studios, amateur radio transmitters, paging and call systems. Each conductor tinned copper; color coded plastic insulation; twisted; spiral wrapped copper shield; gray vinyl plastic jacket overall. ♯Colors of conductors: 1-4 See Table Two.

Conductor			Nominal			Alpha No.	Net Per Spool	
No.	Size	Strand	Ins.	Jack.	O.D.		1000′	100′
2	22	7/30	.016″	.020″	.175″	2254	$37.16	$4.17
2	22	1	.016″	.020″	.170″	2255	33.06	3.75
2	20	10/30	.016″	.020″	.195″	2256	43.02	4.76
3	20	10/30	.016″	.020″	.210″	3256	62.72	6.7[illegible]
4	20	10/30	.016″	.020″	.225″	4256	94.85	9.93
2	18	16/30	.016″	.020″	.230″	2258	53.00	5.75

STOCK COLORS

*TABLE ONE

No.	Color	No.	Color	No.	Color	No.	Color
1	Black	4	Green	7	Brown	10	Slate
2	White	5	Yellow	8	Orange		
3	Red	6	Blue	9	Purple		

♯TABLE TWO

1	Black	4	Green	7	Brown	10	Slate
2	Red	5	Orange	8	Yellow	11	Pink
3	White	6	Blue	9	Purple	12	Tan

Alpha Electronic Wire and Cable

SHIELDED MICROPHONE CABLE (FIG. A)

VINYL PLASTIC JACKET

conductor stranded tinned copper; polyethylene insulation, coded, braided or spiral wrapped tinned copper shield, ne colored vinyl plastic jacket. Oil and moisture resistant; le; will not mark or stain; resists aging and rough usage. Low itance, high insulation resistance, low attenuation. Nos. 1706: For high impedance microphones. Nos. 1710-1717: For mpedance microphones.

code of conductors: 1—White; 2—Black; 3—Red; 4—Green; ellow; 6—Blue.

onductor		Nominal		Alpha No.	Net Spool	
Size	Strand	Capacity*	O.D.		1000′	100′
26	3/34† 4/34‡	38 μμf/ft.	.125″	1702	$27.42	$ 3.20
24	10/34	35 μμf/ft.	.145″	1703	30.47	3.50
24	10/34	23 μμf/ft.	.200″	1704	43.56	4.80
20	26/34	36 μμf/ft.	.175″	1706	53.94	5.85
22	16/34	31 μμf/ft.	.235″	1710	60.69	6.53
20	26/34	34 μμf/ft.	.295″	1713	85.73	8.58
20	26/34	36 μμf/ft.	.320″	1715	102.90	10.29
20	26/34	45 μμf/ft.	.350″	1716	126.81	12.68
20	26/34	45 μμf/ft.	.375″	1717	184.04	18.93

ween one conductor and remaining conductors connected ield.

ned copper. ‡Steel.

BLACK RUBBER JACKET (FIG. B)

conductor stranded tinned copper; rubber insulation, color l, braided tinned copper shield; cotton wrap, tough black r jacket overall. Extremely flexible; designed for heavy o use. Nos. 1248-1249/18: For high impedance microphones; code of conductor, black. Nos. 1250-1252/18: For low imnce microphones. Color code of conductors: 1—Black; 2—e; 3—Red; 4—Green.

onductor		Nominal		Alpha No.	Net Spool	
Size	Strand	Capacity*	O.D.		1000′	100′
20	26/34	40 μμf/ft.	.175″	1248	$62.55	$ 6.71
20	26/34	30 μμf/ft.	.245″	1249	78.11	8.27
18	41/34	45 μμf/ft.	.250″	1249/18	94.44	9.90
20	26/34	70 μμf/ft.	.275″	1250	85.46	9.00
18	41/34	75 μμf/ft.	.305″	1250/18	114.21	11.87
20	26/34	80 μμf/ft.	.285″	1251	99.08	10.37
18	41/34	85 μμf/ft.	.325″	1251/18	183.26	18.78
20	26/34	90 μμf/ft.	.305″	1252	116.15	12.06
18	41/34	64 μμf/ft.	.335″	1252/18	203.49	20.88

ween one conductor and remaining conductors connected eld.

HI-FI INTERCONNECTING CABLE

PHONO WIRE

wiring phono arm from cartridge to amplifier. **No. 1200**—e conductor 24 AWG stranded tinned copper; white vinyl c insulation; fine close tinned copper shield overall **No. 1201**—as No. 1200, plus cotton braid over shield. **No. 1202**—Same o. 1200 except two conductors (black and red) with shield ll. **No. 2606-3606**—Each conductor 30 AWG stranded tinned r; plastic insulation; conductors color coded and twisted. code of conductors: 1—White; 2—Black; 3—Red.

SHIELDED (FIG. C)

Conductor		Nominal		Alpha No.	Net Per Spool	
Size	Strand	Ins.	O.D.		1000′	100′
24	16/36	.016″	.080″	1200	$28.73	$3.26
24	16/36	.016″	.115″	1201	29.67	3.44
24	16/36	.016″	.125″	1202	44.10	4.71

UNSHIELDED (Not Illus.)

30	7/38	.010″	.065″	2606	$16.07	$1.91
30	7/38	.010″	.070″	3606	29.96	3.30

SHIELDED INPUT CABLE (FIG. D)

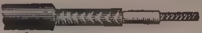
from tuner or tape recorder to amplifier. Single conductor WG stranded tinned copper; polyethylene insulation; braided d copper shield; gray vinyl plastic jacket overall.

nductor	Nominal		Alpha No.	Net Per Spool	
Strand	Capacity	O.D.		1000′	100′
10/34	35 μμf/ft.	.145″	1703	$30.47	$3.50
10/34	23 μμf/ft.	.200″	1704	43.56	4.80

PLASTIC SPEAKER CABLE (FIG. E)

from amplifier to speaker(s). **No. 1977**—Two conductors lel, 18 AWG stranded bare copper; plastic insulation; color l. Stock colors: 1—Brown; 2—Black; 3—White; 4—Gray; nk; 6—Light Blue; 7—Yellow; 8—Green. U/L type SPT-1). **No. 1897**—Two conductors, 18 AWG stranded tinned r; plastic insulation; color coded black and red; twisted gray plastic jacket overall. **No. 1944**—Two conductors parallel, WG stranded copper, one conductor tinned, the other bare, c insulation; color coded. Stock colors: Same as for No. 1977, —Red; and 10—Tan.

d. nd	Nominal			Alpha No.	Net Per Spool	
	Ins.	Jacket	O.D.		1000′	100′
4	.016″	....	.215″ x .130″	1977	$24.68	$2.93
0	.016″	.020″	.200″	1897	36.80	4.13
2	.016″	....	.057″ x .120″	1944	10.07	1.38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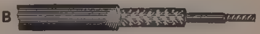
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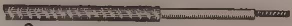
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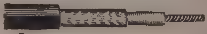
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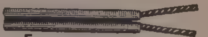
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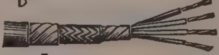
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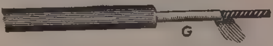
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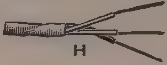
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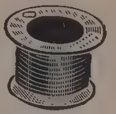
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SHIELDED MULTI-CONDUCTOR (FIG. F)

For use as shielded electronic power cable, mike cable, control circuits, video and audio interconnecting, broadcast and heavy-duty studio use. Each conductor stranded tinned copper with rubber insulation; color coded, twisted cotton wrapped, covered with braided tinned copper shield, cotton wrap and outer jacket of tough, black neoprene rubber overall. Oil and acid resistant; suitable for outdoor use and direct burial. Resists aging and rough use. Color code of conductors: 1—Black; 2—White; 3—Red; 4—Green; 5—Yellow; 6—Blue.

Conductor			Nominal		Alpha No.	Net Per Spool	
No.	Size	Strand	Ins.	O.D.		1000′	100′
1	18	41/34	.040″	.250″	1449	$104.94	$11.03
2	18	41/34	.020″	.305″	1450	146.28	15.15
3	18	41/34	.020″	.325″	1451	214.65	21.99
4	18	41/34	.020″	.335″	1452	238.50	24.38
6	18	41/34	.020″	.430″	1454	414.90	42.02

INDUSTRIAL MULTI-CONDUCTOR (FIG. H)

For telephones, intercoms, annunciators, remote control circuits, speaker cable, alarm systems, P.A. systems and thermostat use. Conductors are 18 AWG solid tinned copper with color-coded plastic insulation; twisted and covered in gray vinyl plastic jacket overall. Color code of conductors: 1—Black; 2—Red; 3—White; 4—Green; 5—Orange; 6—Blue.

Conductor		Nominal		Alpha No.	Net Per Spool	
No.	Size	Ins.	O.D.		1000′	100′
2	18 Solid	.016″	.190″	1797	$31.98	$3.65
3	18 Solid	.016″	.210″	1798	44.42	4.89
4	18 Solid	.016″	.225″	1798/4	61.82	6.71
5	18 Solid	.016″	.235″	1798/5	78.20	8.34
6	18 Solid	.016″	.265″	1798/6	94.04	9.93

KINKLESS TEST LEAD WIRE (FIG. G)

For use as test leads in testing apparatus or wherever an extra-flexible insulated wire is required. Heavy duty type designed for TV, therapeutic equipment, analyzers, oscillators, etc. Single conductor extra flexible tinned soft annealed copper, concentric strand; cotton wrap; rubber insulation, satin finish. Stock colors: 1—Black; 2—Red; 3—Green; 4—Yellow.

STANDARD TYPE

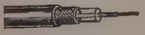
Conductor		Nominal		Colors	Alpha No.	Net per Spool	
Size	Strand	Ins.	O.D.			1000′	100′
20	41/36	.044″	.135″	1, 2	1634	$16.55	$1.95
20	41/36	.047″	.140″	1-4	1635	18.47	2.15
18	65/36	.047″	.150″	1-3	1636	20.85	2.39

"ALMAG" MIL-W-583A MAGNET WIRE (FIG. I)

For radio and audio frequency coils, transformers, chokes, speaker field coils, tuners, armatures, coils, etc. **Series PE**—Plain enamel single, round, bare copper conductor with continuous film of insulating enamel; Type T per MIL-W-583A spec.; 105° C. **Series HF**—Heavy Formvar single round, bare copper conductor with baked film insulation from a varnish based on a vinyl acetate resin. Type T2 per MIL-W-583A spec.; 105° C.

Size	Plain Enamel				Heavy Formvar			
	Alpha No.	Nom. O.D.	Net Spool of ¼ lb.	Net Spool of 1 lb.	Alpha No.	Nom. O.D.	Net Spool of ¼ lb.	Net Spool of 1 lb.
44	PE-44	.0023″	$3.44	$13.01	HF-44	.0026″	$4.16	$15.38
42	PE-42	.0028″	2.46	9.12	HF-42	.0032″	2.46	8.90
40	PE-40	.0034″	1.07	4.16	HF-40	.0038″	1.89	6.92
38	PE-38	.0044″	.80	3.06	HF-38	.0049″	1.43	5.21
36	PE-36	.0055″	.68	2.54	HF-36	.0060″	1.19	4.56
34	PE-34	.0069″	.62	2.27	HF-34	.0075″	1.02	3.92
32	PE-32	.0087″	.57	2.09	HF-32	.0095″	.92	3.48
30	PE-30	.0108″	.54	1.95	HF-30	.0116″	.78	2.91
28	PE-28	.0135″	.53	1.91	HF-28	.0144″	.75	2.78
26	PE-26	.0169″	.50	1.82	HF-26	.0180″	.68	2.51
24	PE-24	.0212″	.48	1.71	HF-24	.0224″	.65	2.33
22	PE-22	.0266″	.48	1.68	HF-22	.0277″	.62	2.21
20	PE-20	.0332″	.44	1.62	HF-20	.0346″	.60	2.03
18	PE-18	.0416″	.44	1.53	HF-18	.0432″	.57	1.94
16	PE-16	.0522″	.47	1.53	HF-16	.0539″	.57	1.76
14	PE-14	.0657″	.47	1.53	HF-14	.0673″	.57	1.76
12	PE-12	.0825″	.47	1.53	HF-12	.0842″	.57	1.76
10	PE-10	.1037″	.47	1.53	HF-10	.1056″	.57	1.76

Belden Electronic Wire and Cable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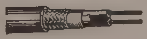
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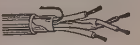
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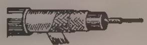
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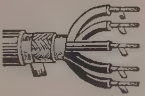
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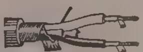
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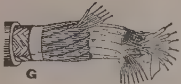
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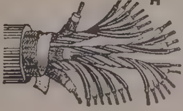
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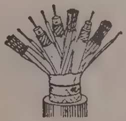
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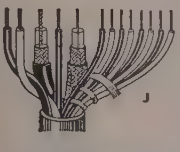
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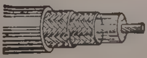
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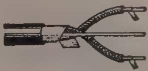
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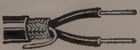
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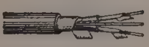
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MICROPHONE AND SHIELDED POWER SUPPLY CABLES

Long flex life and high tensile strength for microphones, hi-fi connection, shielded interconnection power supply, remote control and strain gauges. **Color-coded:** 1—White, 2—Black, 3—Red, 4—Green 5—Blue, 6—Brown, 7—Yellow, 8—Orange.

PLASTIC JACKET CABLE

Ideal for applications where lower capacitance, lower loss, greater ozone and oil resistance, lighte weight and smaller size are desired. **Nos. 8401 and 8411:** 3 strands copper, 4 strands Copperweld® tinned, polyethylene insulation, tinned copper braid shield, chrome vinyl jacket. **No. 8434:** 3 strand copper, 4 strands Copperweld®, tinned, polyethylene insulated, black and red conductors unde Beldfoil® aluminum-Mylar® shield, stranded ground wire, green and white conductors under overal Beldfoil® shield, chrome vinyl jacket. **All Others:** Tinned copper, polyethylene insulated, cabled tinned copper braid shield, chrome vinyl jacket.

Belden No.	Fig.	No. Cond.	AWG and (Stranding)	Cap., µµf/ft.*	Nom. O.D.	Net Each, Spool of						
						15′	25′	50′	100′	250′	500′	1000′
8411	A	1	25 (7 x 33)	34†	.144″	$0.71	$1.01	$1.75	$ 3.15	....	$13.35	......
8401	A	1	25 (7 x 33)	25†	.200″	.87	1.20	2.35	4.30	....	18.00	......
8422	B	2	22 (16 x 34)	32	.231″	1.15	1.75	3.25	5.85	....	26.25	......
8403	B	3	20 (26 x 34)	45	.247″	1.45	......	3.60	6.75	$16.50	33.75	$ 67.5
8404	B	4	20 (26 x 34)	45	.250″	1.50	......	4.05	7.65	19.50	38.25	76.5
8405	B	5	20 (26 x 34)	45	.275″	1.90	......	4.95	10.00	25.15	49.85	99.3
8434	C	4	25 (7 x 33)	40	.169″	......	......	......	4.65	....	22.50	45.0

RUBBER JACKET CABLE

Has greater abrasion and impact resistance along with extra limpness so cable will lie flat on stage o studio floor. **No. 8410:** 3 strands copper, 4 strands Copperweld®, tinned, rubber insulated, tinne copper braid shield and black rubber jacket. **No. 8414:** Extra limp mike cable; tinned copper, rubbe insulated, cabled, conductive textile wrapped shield, stranded ground wire, black rubber jacket. **Al Others:** Tinned copper, rubber insulated, cabled, tinned copper braid shield, black rubber jacke

8410	D	1	25 (7 x 33)	33†	.245″	$1.35	$2.10	$3.90	$ 7.35	....	$34.50	......
8412	E	2	20 (26 x 34)	68	.268″	1.53	2.35	4.30	8.25	....	37.90	......
8428	E	2	18 (41 x 34)	80	.295″	1.75	2.85	5.40	10.50	....	50.25	......
8423	E	3	20 (26 x 34)	85	.277″	1.80	......	4.80	9.30	$22.50	45.35	$ 90.3
8424	E	4	20 (26 x 34)	95	.295″	1.95	......	5.65	10.60	25.65	51.40	102.7
8425	E	5	20 (26 x 34)	80	.323″	2.25	......	6.70	13.20	32.25	....	......
8426	E	6	20 (26 x 34)	78	.349″	2.70	......	8.20	15.75	39.45	....	......
8427	E	7	20 (26 x 34)	75	.360″	2.95	......	8.85	17.25	42.00	....	......
8418	E	8	20 (26 x 34)	75	.386″	2.95	......	9.00	17.40	42.90	....	......
8414	F	2	20 (26 x 34)	80	.256″	......	......	3.55	....	....	32.25	..

*Capacitance between one conductor and other conductors connected to shield. †Capacitance betwee conductor and shield.

TV CAMERA CABLES

Preferred by TV camera operators requiring dependable service under all conditions in which lighte weight, lower coefficient of friction, greater flexibility and easier termination are essential. Assur proper electronic characteristics because of quality controlled engineering and inspection.

Belden No. 8283 (Fig. G)—82-conductor TV color camera cable has four 14 AWG (19 x 27) tinne copper conductors vinyl plastic insulated, color coded; three 16 AWG (26 x 30) tinned copper, viny plastic insulated, color coded; Beldfoil® aluminum-Mylar® wrapped shield around those seven con ductors cabled with stranded, tinned copper drain wire. Eight color-coded coaxial cables have 53.5 oh nominal impedance; 67-22 AWG (7 x 30) tinned copper conductors, vinyl plastic insulated, color coded 7 under conductive textile shield with stranded ground wire; tinned copper braid shield. Chrome viny plastic jacket; nominal 1.22″ O.D. Cut to customer's specified length, max. 1,100 ft.
1000 ft., Net......................**$2250.00** **Less than 1000 ft.,** Net per foot........**$2.6**

Belden No. 8280 (Fig. H)—28-conductor camera cable. Four 18 AWG (16 x 30) tinned copper, viny insulated, color coded; 21-22 AWG (7 x 30) tinned copper, vinyl insulated, cabled in 3 groups of 7, colo coded; 3 coaxial cables color coded, nominal impedance 51 ohms; tinned copper braid shield; chron vinyl jacket of .750″ nominal O.D. Cut to customer's specified length, max. 1,100 ft.
1000 ft., Net........................**$600.00** **Less than 1000 ft.,** Net per foot........**$0.7**

Belden No. 8284 (Fig. I)—24-conductor camera cable has 17-22 AWG (7 x 30) tinned copper, viny insulated color coded conductors; 4-16 AWG (26 x 30) tinned copper, vinyl insulated, color coded 3 coaxial cables color coded, nom, impedance 53.5 ohms; tinned copper braid shield; heavy cotto braid; chrome vinyl plastic jacket, .800″ nom. O.D. Cut to customer's specified length, max. 1,100 f
1000 ft., Net........................**$675.00** **Less than 1000 ft.,** Net per foot........**$0.7**

Belden No. 8282 (Fig. J)—13-conductor TV eye cable. Nine 22 AWG (7 x 30) tinned copper, viny insulated, color coded; 2-18 AWG (16 x 30) tinned stranded copper, vinyl insulated, black and re 1 RG-58A/U 50-ohm coax cable; one 72-ohm coax stranded conductor, Mylar® tape wrapped; chron vinyl jacket, .470″ nom. O.D. **50 ft. Spool,** Net...................................**$13.5**
100 ft. Spool, Net....**$27.00** **500 ft. Spool,** Net...**$135.00** **1000 ft. Spool,** Net..**$270.0**

75-OHM VIDEO CABLE NO. 8281 (FIG. K)

High quality carrier of video signal in color or monochrome studios with superior picture definitio eliminates problems of periodicity. Rigid control assures concentricity and all dimensional tolerance center conductor is maintained at same distance from shield through entire cable length; 100% swee tested. Solid 20 AWG copper conductor polyethylene insulated, tinned copper double braid shiel black polyethylene jacket. Nom. O.D. .310″. Nominal impedance 75 ohms. Nominal capacity, 20 µµf/ft.
100 ft. Spool, Net....**$16.50** **500 ft. Spool,** Net....**$82.50** **1000 ft. Spool,** Net..**$165.0**

BROADCAST AUDIO CABLES

Spiral wrapped copper shields plus drain wire and shield isolation eliminate current loops. Fre stripping jackets, fast shield termination and small diameter simplify installation. **No. 8436:** Tinn copper, Celanese® wrap, Celanese braid lacquered, conductors cabled, tinned copper drain wire, tinn copper spiral wrapped shield, black vinyl jacket. **No. 8440:** Tinned copper, enameled, cotton wra cotton braid, conductors cabled, tinned copper drain wire, tinned copper spiral wrapped shield, chro vinyl jacket. **Nos. 8437 and 8441:** Tinned copper, vinyl insulated, cabled, tinned copper drain wir tinned copper braid shield, paper tape, black vinyl jacket. **Color-coded:** Black and Red.

Belden Number	Fig.	AWG and (Stranding)	Nom. O.D.	Suggested Work Volts	Cap.,* µµf/ft.	Net Each, Spool of		
						100′	500′	1000′
8436	L	22 (Solid)	.180″	100	52	$4.75	$21.30	$42.4
8437	M	22 (Solid)	.200″	200	85	3.85	18.45	36.7
8441	M	22 (16 x 34)	.210″	200	86	4.50	21.30	42.0
8440	N	22 (Solid)	.185″	100	90	4.60	19.95	39.7

*Between one conductor and other conductors tied to shield.

® Trade Mark: Copperweld of Copperweld Steel Co.; Mylar of DuPont; Beldfoil of Belden; Celane of Celanese Corp.

elden Electronic Wire and Cable

TWO AND THREE CONDUCTOR SHIELDED CABLE

ety of gauges, insulations, shieldings and jackets meet every service requirement. Uniform quality ependable service. **Fig. A Types:** Tinned copper conductors vinyl insulated, tinned copper spiral pped shield, chrome vinyl jacket. **Fig. B Type:** Tinned copper conductors polyethylene insulated, ded tinned copper ground wire, Beldfoil® aluminum-Mylar® wrapped shield, chrome vinyl jacket. **C Type:** Tinned copper conductors rubber insulated, braided tinned copper shield, chrome vinyl et. **Fig. D Type:** Tinned copper conductor, rubber insu'ated, braided tinned copper shield, white n braid treated for weather resistance. **Fig. E. Types:** Tinned copper conductor vinyl insulated, led tinned copper shield without jacket. **Fig. F Types:** Tinned copper, rubber insulated, cotton l, lacquered, cabled, braided tinned copper shield. **Fig. G Type:** Enameled copper, cotton wrap, n braid, cabled, braided tinned copper shield. **For other 2 and 3 conductors, see Mike and Broad- Audio Cables.**

TWO CONDUCTOR SHIELDED

8739, 8737, 8762, 8759 and 8790 are recommended for stationary low impedance mike lines

en	Fig.	AWG and (Stranding)	Nom. O.D.	Cap.,* μμf/ft.	Suggested Work Volts	Net Each, Spool of 15′	50′	100′	500′	1000′
†	A	22 (Solid)	.160″	66	350	....	....	$2.95	$12.25	$24.45
†	A	22 (7 x 30)	.170″	70	350	....	....	3.60	14.65	28.95
†	A	20 (7 x 28)	.195″	79	350	....	....	3.90	18.00	34.50
§	A	18 (7 x 26)	.231″	92	450	....	....	4.45	20.00	40.00
‡	A	16 (19 x 29)	.266″	98	450	....	....	5.70	27.00	54.00
‡	B	20 (7 x 28)	.184″	49	350	....	....	3.45	16.50	31.50
§	C	18 (16 x 30)	.270″	77	200	$1.17	3.25	5.95	27.40	54.75
§	D	18 (16 x 30)	.258″	89	200	1.17	3.25	5.95	27.40	54.75
†	E	22 (Solid)	.130″	61	350	....	....	2.55	10.50	21.00
†	E	20 (7 x 28)	.165″	72	350	....	....	3.00	13.90	27.75
‡	E	18 (7 x 26)	.205″	89	450	....	....	4.30	19.35	38.70
‡	E	16 (19 x 26)	.225″	112	600	....	....	5.25	24.30	48.00
†	F	20 (10 x 30)	.225″	86	150	....	....	6.40	29.25	58.50
‡	G	18 (Solid)	.165″	50	100	....	....	4.50	21.75	43.50

r coded: †Black, Red. §Red, White. ‡Black, White. *Between one conductor and other con- or(s) connected to shield.

THREE CONDUCTOR SHIELDED

r coded Black, Red, White except No. 8433, which is coded Black, Red, Yellow.

	A	22 (Solid)	.188″	57	350	....	....	$3.15	$14.25	$28.50
	A	18 (7 x 26)	.236″	84	450	....	....	5.40	25.20	50.40
	....	22 (7 x 30)	.199″	60	350	$0.87	$2.30	4.30	19.15	38.25
	F	20 (10 x 30)	.230″	76	175	.. .	. ...	7.80	37.50	....

TWO AND THREE CONDUCTOR UNSHIELDED CABLE

urpose cable for sound, intercom and alarm systems in a variety of sizes and insulations. Uniform ty and size for dependable service, easy installation. **Fig. H Types:** Cabled vinyl insulated copper uctors. **Fig. I Types:** Cabled vinyl insulated copper conductors in chrome vinyl jacket. **Fig. J Type:** ed copper conductors rubber insulated and cabled inside white cotton braid treated for weather ance. **For other unshielded cables, see listings on Juke Box and Portable Cordage.**

TWO CONDUCTOR UNSHIELDED

den o.	Fig.	AWG and (Stranding)	Col- ors‡	Nom. O.D.	Suggested Work Volts	Net Each, Spool of 25′	100′	500′	1000′
82	H	19 (Solid)*	1	.115″	350	....	$1.60	$ 6.15	$11.75
92	H	19 (Solid)†	2	.170″	600	....	1.80	7.15	13.90
60	H	18 (7 x 26)	3	.175″	450	....	2.25	9.45	18.75
70	H	16 (19 x 29)	3	.195″	600	....	2.85	12.00	24.00
40	I	22 (Solid)	4	.150″	200	....	1.80	7.00	13.50
05	I	20 (10 x 30)	4	.190″	350	$0.83	2.50	10.15	19.90
86	I	19 (Solid)*	1	.162″	350	....	2.10	9.00	18.00
61	I	18 (7 x 26)	3	.195″	450	....	3.15	13.80	27.00
71	I	16 (19 x 29)	3	.246″	600	....	4.00	17.10	34.20
04	J	18 (16 x 30)	5	.220″	200	1.28	3.75	16.15	32.25

THREE CONDUCTOR UNSHIELDED

83	H	19 (Solid)*	6	.132″	350	....	$1.95	$ 8.25	$16.50
93	H	19 (Solid)†	2	.170″	600	....	2.25	9.90	19.80
43	I	22 (7 x 30)	7	.150″	200	$0.83	2.48	10.15	20.25
87	I	19 (Solid)*	6	.180″	350	....	2.65	11.55	23.10

tinned. †One conductor tinned, one insulation ribbed.
rs: 1—Brown, Tan. 2—All white or brown (specify). 3—Black, White. 4—Black, Red. 5—Red, e. 6—Brown, Gray, Tan. 7—Black, Green, Red.

PORTABLE CORDAGE AND MULTIPLE CONDUCTORS (FIG. K)

for power supply cordage, flexible speaker lines and unshielded control cables; abrasion and ct resistant, and limp. Stranded copper conductors, rubber insulated and cabled with fillers, er jacket; 300 volts, 60° C.

en	No. Cond.	AWG and (Stranding)	Col- ors‡	Nom. O.D.	Net Each, Spool of 15′	25′	50′	100′	250′	500′	1000′
†	2	18 (41 x 34)	1	.245″	$0.90	$1.50	$2.50	$4.50	$10.75	$21.40	$42.75
§	2	18 (41 x 34)	1	.299″	......	1.65	2.95	5.40	13.50	....	54.00
§	2	16 (65 x 34)	1	.325″	......	1.90	3.75	7.15	17.81	....	......
	3	18 (41 x 34)*	2	.265″	1.20	......	3.15	5.65	....	27.40	......
	4	18 (41 x 34)*	3	.265″	1.45	......	3.60	6.90	....	34.50	69.00
	5	3-20 (26 x 34)* 2-18 (41 x 34)*	4	.280″	1.50	......	4.05	7.65	18.75	....	......

ned. †UL Type SV. §UL Type SJ. ‡Colors: 1—Black, White. 2—Black, White, Green. 3—Black, e, Brown, Red. 4—Brown, Green, White; Black, Red.

JUKE BOX CABLES

L Type: Parallel copper conductors chrome vinyl insulated; 1 conductor tinned. **Fig. M Type:** rol cable; tinned copper conductors vinyl insulated, cabled, chrome vinyl jacket; Blue, Green, ge. **Fig. N Types:** Control cable; tinned copper vinyl insulated, 3 or 4 conductors twisted under d copper braid shield, 2 conductors twisted and unshielded, chrome vinyl jacket; 8785 Blue, w; Black, Green, Red. 8786 Blue, White; Black, Green, Red, Yellow. **Fig. O Type:** Remote stereo ne control cable. Polyethylene insulated, vinyl jacket.

len .	Fig.	No. Cond.	AWG and (Stranding)	Nom. O.D. In.	Suggested Work Volts	Net Each, Spool of 25′	50′	100′	500′	1000′
32	L	2	24 (7 x 32)	.058 x .115	300	$0.53	$0.78	$1.23	$ 4.80	$9.30
33	M	3	1-20 (10 x 30) 2-16 (26 x 30)	.250	450	......	......	4.50	21.00	.....
35	N	5	22 (7 x 30)	.211 x .316	350	......	......	5.25	25.13	.....
36	N	6	2-22 (7 x 30) 4-24 (7 x 32)	.211 x .316	350	......	......	5.75	27.75	....
37	O	10	4-24 (7 x 32)† 4-24 (7 x 32)* 2-22 (7 x 30)♯	.330	350	......	......	19.20	93.75	.....

ade Mark: Beldfoil of Belden; Mylar of DuPont. †Shielded; Gray, White, Blue, Green. *Shielded; Brown, Yellow, Orange. ♯Unshielded; White, Blue.

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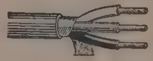

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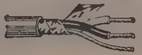

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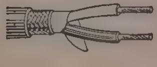

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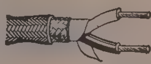

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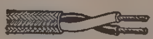

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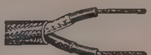

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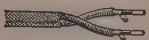

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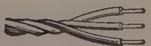

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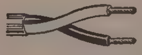

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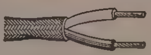

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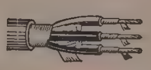

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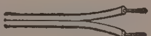

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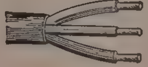

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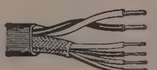

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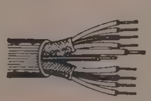
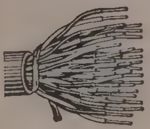
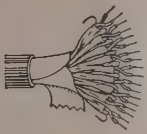
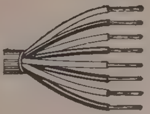
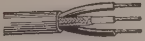


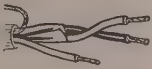
Belden Electronic Wire and Cable

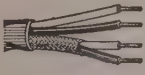


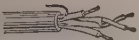


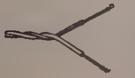


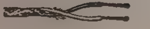


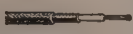


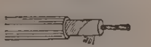












MULTIPLE PAIR INTERCOM CABLE

UNSHIELDED INTERCOM CABLE (FIG. A)

Made with 80C vinyl plastic compounds for high dielectric strength and best physical properties; small size, free stripping and tear resistant. Conductors are paired with a short-lay twist for conductor balance to assure a quiet circuit, free from crosstalk. Vinyl insulated #22 tinned copper conductors cabled in pairs, chrome vinyl jacket. Suggested voltage, 200 v. working.

Belden No.	No. of Pairs	Stranding	Nom. O.D.	Net Each, Spool of 100′	500′	1000′
8740	1	Solid	.150″	$ 1.80	$ 7.00	$ 13.50
8741	2	Solid	.201″	2.95	12.70	25.00
8742	3	Solid	.240″	3.90	17.55	34.50
8743	6	Solid	.305″	6.00	27.75	55.50
8747	6	7 x 30	.340″	8.25	39.75	79.50
8744	9	Solid	.354″	8.10	38.65	77.25
8748	9	7 x 30	.389″	11.40	57.00	114.00
8753	11	Solid	.384″	10.95	54.75	109.50
8754	13	Solid	.409″	12.40	61.90	123.75
8745	15	Solid	.420″	13.95	69.75	139.50
8749	15	7 x 30	.425″	19.50	91.65	183.30
8755	19	Solid	.480″	20.10	100.50	201.00
8756	23	Solid	.510″	23.25	116.25	232.50
8746	27	Solid	.550″	....	.30*	255.00
8750	27	7 x 30	.595″	......	.40*	345.00

*Per foot cut to customer's specified length under 1000′.

INDIVIDUALLY SHIELDED INTERCOM CABLE (FIG. B)

Similar to above but with pairs individually shielded to eliminate crosstalk and noise. Vinyl insulated #22 tinned copper conductors cabled in pairs with ground wire under Beldfoil® aluminum-Mylar® shield; overall chrome vinyl jacket. Nominal capacitance, 77 μμf/ft. between one conductor and other conductor connected to shield. Suggested voltage, 300 v. working.

Belden No.	No. of Pairs	Stranding	Nom. O.D.	Net Each, Spool of 100′	500′	1000′
8764	9	Solid	.425″	$18.00	$ 90.00	$180.00
8766	15	Solid	.510″	28.50	142.50	285.00

COLOR CODING

Pair No.	Color Combination
1	Black paired with Red
2	Black paired with White
3	Black paired with Green
4	Black paired with Blue
5	Black paired with Brown
6	Black paired with Yellow
7	Black paired with Orange
8	Red paired with Green
9	Red paired with White
10	Red paired with Blue
11	Red paired with Yellow
12	Red paired with Brown
13	Red paired with Orange
14	Green paired with Blue
15	Green paired with White
16	Green paired with Brown
17	Green paired with Orange
18	Green paired with Yellow
19	White paired with Blue
20	White paired with Brown
21	White paired with Orange
22	White paired with Yellow
23	Blue paired with Brown
24	Blue paired with Orange
25	Blue paired with Yellow
26	Brown paired with Orange
27	Brown paired with Yellow

MULTIPLE UNPAIRED INTERCOM CABLE (FIG. C)

Ideal for control, annunciator and communication circuit applications. Waterproof, oil and weather resistant, flexible, lightweight, small in diameter, tear resistant and easily stripped. Tinned copper conductors in vinyl plastic insulation, cabled in chrome vinyl jacket. Suggested voltage, 200 v. working. **Color Coding:** 1—Black, 2—Red, 3—Green, 4—White, 5—Brown, 6—Blue, 7—Orange, 8—Yellow, 9—Purple. 18-gauge conductors are Black and Red.

Belden No.	No. of Cond.	AWG and (Stranding)	Nom. O.D.	Net Each, Spool of 15′	25′	100′	500′	1000′
8443	3	22 (7 x 30)	.150″	....	$0.83	$2.48	$10.15	$20.25
8444	4	22 (7 x 30)	.168″	....	.98	3.00	13.15	26.25
8445	5	22 (7 x 30)	.180″	....	1.16	3.70	16.30	32.55
8446	6	4-22 (7 x 30); 2-18 (16 x 30)	.222″	$1.05	....	5.40	24.75	49.50
8447	7	5-22 (7 x 30); 2-18 (16 x 30)	.246″	1.15	....	6.15	28.15	56.25
8448	8	6-22 (7 x 30); 2-18 (16 x 30)	.251″	1.20	....	6.40	30.30	60.60
8449	9	7-22 (7 x 30); 2-18 (16 x 30)	.261″	1.30	....	7.15	33.00	66.00

SPECIAL INTERCOM AND SOUND CABLES

For systems requiring shielded lines cabled with unshielded control lines.
Belden No. 8734 (Fig. D)—Tinned copper, vinyl insulated, 1 white coded conductor with tinned copper braid shield, 3 conductors cabled in chrome vinyl jacket; unshielded conductors coded Black, Red. Conductors 22 AWG, 7 x 30 stranded, O.D., .194″ nominal. Suggested 350 v. working.
100′ Spool, Net........**$3.75** **500′ Spool,** Net.......**$16.50** **1000′ Spool,** Net......**$32.25**

Belden No. 8763 (Fig. E)—Three 20 AWG, 7 x 28 stranded, tinned copper conductors polyethylene insulated; 2 conductors (Black, Red) shielded in Beldfoil® aluminum-Mylar® wrap; unshielded conductor coded White; with #20 stranded tinned copper ground wire, chrome vinyl jacket. O.D., .21″ nominal. Suggested 350 v. working.
100′ Spool, Net........**$4.45** **500′ Spool,** Net.......**$19.50** **1000′ Spool,** Net......**$39.00**

Belden No. 8732 (Fig. F)—Four 22 AWG, 7 x 30 stranded tinned copper conductors polyethylene insulated; tinned copper braid shield over 2 (Black, White) conductors; unshielded conductors coded Black, White; overall chrome vinyl jacket, O.D., .188″ x .296″ nominal Suggested 350 v. working.
100′ Spool, Net........**$4.50** **500′ Spool,** Net......**$21.35** **1000′ Spool,** Net......**$42.75**

Belden No. 8722 (Fig. G)—Four 20 AWG, 7 x 28 stranded, tinned copper conductors vinyl insulated; Beldfoil® aluminum-Mylar® wrapped shield over 2 conductors (Black, Red); unshielded conductors coded Green, White; #20 stranded tinned ground wire, overall chrome vinyl jacket. O.D., .260″ nominal. Suggested 350 v. working.
100′ Spool, Net........**$5.25** **500′ Spool,** Net.......**$24.00** **1000′ Spool,** Net......**$48.00**

HI-FI, STEREO AND PHONOGRAPH CABLES

Shielded connector cords and phono pick-up arm cables are light, flexible and small diameter with excellent dielectric strength. For maximum channel isolation in stereo phono pickups use one cable for each channel (or total of 4 conductors in two pairs).

Belden No. 8430 (Fig. H)—Phono arm cable has two 32 AWG, 7 x 40 stranded, tinned copper conductors, vinyl insulated, twisted, O.D., .055″ nominal. Coded Black, Red. Capacitance, 21 μμf/ft., nominal.
10′ Spool, Net............**44c** **25′ Spool,** Net............**65c** **250′ Spool,** Net........**$3.90**

Belden No. 8429 (Fig. I)—Phono arm cable same as above, but with tinned copper braid shield. Capacitance 38 μμf/ft. one conductor to other conductor and shield.
10′ Spool, Net............**57c** **25′ Spool,** Net............**98c** **250′ Spool,** Net........**$6.75**

Belden No. 8431 (Fig. J)—Single 24 AWG, 16 x 36 stranded, tinned copper conductor, rubber insulated, with tinned copper braid shield and brown cotton braid overall. O.D., .095″ nominal. Capacitance, 96 μμf/ft., nominal. **10′ Spool,** Net............**53c** **15′ Spool,** Net............**66c**
25′ Spool, Net.........**$1.01** **100′ Spool,** Net........**$3.15** **500′ Spool,** Net.......**$13.95**

Belden No. 8421 (Fig. K)—Hi-fi connecting cable has single 25 AWG, 7 x 33 stranded of 3 strands tinned copper, 4 strands tinned Copperweld®; cellular polyethylene insulated for low loss, tinned copper spiral wrapped shield and overall chrome vinyl jacket. O.D., .180″ nominal. Capacitance, 18 μμf/ft. nominal.
15′ Spool, Net...........**87c** **25′ Spool,** Net.........**$1.20** **50′ Spool,** Net.........**$2.35**
100′ Spool, Net......................**$4.30** **500′ Spool,** Net..........................**$18.00**
®Trade Mark: Beldfoil of Belden; Mylar of DuPont; Copperweld of Copperweld Steel Co.

476-59B

elden Electronic Wire and Cable

TRANSMISSION LINE CABLES

TV TWIN LEAD WIRE

conductors 20 AWG, 7 x 28 stranded, parallel, brown polyethylene insulated. **8230 (Fig. B):** Weldohm® cable has Copperweld® conductors; is 1½ times stronger, 2½ times flexible than similar, common copper types without changing RF electrical characteristics; extra ng. **No. 8275 (Fig. C)**—Copperweld® conductors in polyethylene jacket with inert gas filled unilar polyethylene core: Celluline® cable keeps electrical characteristics uniform by eliminating all ible moisture between conductors; loss is low; provides extra protection against weather for longng UHF or VHF efficiency **No. 8285 (Fig. D)**—Permohm® encapsulated: Copperweld®, 2 conduc- 22 AWG, 7x30 stranded, parallel, orange polyethylene insulation and web between conductors, n cellular polyethylene oval jacket. **All Others:** Bare copper conductors.

en .	Fig.	Imped., Ohms	Nom. O.D. Inch	Nom. Cap. µµf/ft.	Nom. db @ 400 mc‡	Net Each, Spool of					
						25′	50′	75′	100′	500′	1000′
5	A	300	.058 x .400	4.4	2.7	$0.72*	$1.16*	$1.56*	$1.92*	$ 9.00	$17.25
0	B	300	.072 x .400	4.4	2.7	.78*	1.23*	1.70*	2.13*	10.20	19.20
5	C	300	.300 x .400	4.6	2.58	......	2.40†	3.23†	4.28†	21.40	42.00
5	D	300	.255 x .468	5.3	3.3	......	2.85	4.20	5.40	27.00	54.00
4	E	150	.075 x .182	9.5	6.4	......	......	......	2.05	9.75	......
2	E	72	.075 x .128	20.3	15.9	......	......	......	2.05	9.75	......

ncake coil in sleeve. †Coil, available in counter display.

AMATEUR TRANSMITTING AND RECEIVING CABLES

n types rated 1 kw (RF). **No. 8210 (Fig. E):** Two bare copper 13 AWG, 7 x 21 stranded conductors llel, brown ethylene insulated. **No. 8235 (Fig. F):** Two bare copper 18 AWG, 7 x 26 stranded luctors parallel, brown polyethylene insulated.

0	E	72	.166 x .278	21.0	9.3	.....	$3.15	.....	$5.65	$27.00	.....
5	F	300	.185 x .520	5.0	2.20	.....	.....	.....	4.80	21.00	.....

SHIELDED 100-OHM IMPEDANCE LINE (FIG. G)

en No. 8227—One tinned, one bare 20 AWG, 7 x 28 stranded copper conductors, polyethylene ated, cabled in polyethylene jacket, tinned copper braid shield with overall black vinyl jacket. , .325″ nominal. Capacitance, 15.5 µµf/ft. nominal. Attenuation 4.1 db at 100 mc; 10.2 db at mc.

Spool, Net........**$9.00** **250′ Spool,** Net.......**$21.75** **500′ Spool,** Net.......**$43.50**

ANTENNA ROTATOR CABLE

l insulated for better resistance to sun and weather. **Fig. H Type:** Bare copper conductors parallel, me vinyl insulated; 1 conductor tinned and insulation ribbed. **Fig. I Types:** Bare copper conductors l insulated, cabled, chrome vinyl jacket: Color coded 1—Black, 2—Green, 3—Red, 4—White, ellow, 6—Orange, 7—Blue, 8—Brown.

den o.	Fig.	No. Cond.	AWG and (Stranding)	Nom. O.D., Inch	Net Each, Spool of				
					50′	75′	100′	500′	1000′
64	H	4	20 (7 x 28)	.070 x .390	$1.60*	$2.35*	$2.95*	$13.50	$26.75
84	I	4	20 (7 x 28)	.180	....	....	3.15	13.90	27.75
85	I	5	20 (7 x 28)	.190	....	....	3.70	17.00	34.00
88	I	8	22 (7x 30)	.205	....	....	4.50	21.00	40.50

cake coil.

RG/U TRANSMISSION LINE CABLES

JAN-C-17 specifications except where otherwise indicated. Polyethylene insulating material over uctors except as otherwise indicated.

en .	Fig.	RG No.	AWG and (Stranding)	Shields No.	Shields Type	Jacket	Nom. O.D.	Net Each, Spool of				
								25′	50′	100′	500′	1000′
	J	5A/U	16 (Solid) **a**	2	a	GN	.328″	......	......	$25.45	$125.25	$250.50
	K	8/U	13 (7 x 21) **b**	1	b	BV	.405″	......	......	12.40	60.75	121.50
*	K	8A/U†	13 (7 x 21) **b**	1	b	BN	.405″	......	......	14.85	68.25	136.50
	J	9/U	13 (7 x 21) **a**	2	a, b	GN	.420″	......	......	28.90	141.75	283.50
	K	11/U	18 (7 x 26) **c**	1	b	BV	.405″	......	......	11.20	54.75	109.50§
*	K	11A/U	18 (7 x 26) **c**	1	b	BN	.405″	......	......	12.60	61.50	123.00
	L	22A/U	18 (7 x .0152) **b**	2	c	GN	.420″	......	......	22.50	112.50	225.00
	M	54A/U	18 (7 x .0152) **b**	1	c	CP	.250″	......	......	8.25	39.75	79.50
	N	55/U	20 (Solid) **b**	2	c	CP	.206″	......	......	9.00	42.38	84.75
	K	58A/U	20 (19 x .0071) **c**	1	c	BV	.195″	$1.56	$2.55	5.05	24.00	48.00
	K	58/U	20 (Solid) **c**	1	c	BV	.195″	1.50	2.55	4.95	23.50	47.00
*	K	58C/U	20 (19 x .0071) **c**	1	c	BN	.195″	......	......	5.70	27.00	54.00
	K	59/U	22 (‡)	1	b	BV	.242″	1.80	3.15	5.50	25.88	51.75
*	K	59B/U	.0230 (‡)	1	b	BN	.242″	......	......	6.75	30.75	61.50
	O	62/U	22 (‡) ††	1	b	BV	.242″	......	......	5.95	27.38	54.75
	P	71/U	22 (‡) ††	2	c	CP	.250″	......	......	9.55	45.75	91.50

L-C-17B specs. †Or 213/U. ‡Bare Copperweld®. **a**—Silver coated copper. **b**—Bare copper. inned copper. BN—Black non-contaminating vinyl. BV—Black vinyl. CP—Clear polyethylene. —Gray non-contaminating vinyl. §1500′ spool available at **$109.50** per 1000′. ††Semi-solid polylene insulating material.

COMMUNITY AND MULTIPLE SET TV ANTENNA CABLES

ables are sweep tested. Impedance, 75 ohms nominal. **No. 8231:** Conductor is polyethylene insu- l, bare copper shield, black vinyl jacket **Nos. 8212 and 8213:** Conductor covered by cellular polylene, bare copper braid shield, black polyethylene jacket. **Nos. 8232 and 8233:** Conductor covered ellular polyethylene, bare copper braid shield, polyethylene insulated, bare copper braid shield with all black polyethylene jacket.

den o.	Fig.	AWG and (Stranding)	Nom. O.D.	Cap., µµf/ft.	Nom. db @ 400 mc	Net Each, Spool of			
						100′	500′	1000′	1500′
31	K	21 (Solid)	.280″	20.5	5.9	$7.15	$33.75	$ 67.50	....
12	K	20 (Solid)*	.242″	17.3	5.3	5.35	24.00	46.50	....
13	K	14 (Solid)	.405″	17.3	3.4	....	55.50	109.50	$164.25
32	Q	20 (Solid)*	.315″	17.3	5.3	9.15	45.75	91.50	....
33	Q	14 (Solid)	.475″	17.3	3.4	....	80.25	160.50	240.75

nductor is Copperweld®.

TELEVISION AND CHEATER CORDS

en No. 8874 (Not Illus.)—TV cheater cord hanked in descriptive sleeve. Type SP-1 brown er parallel cord with male plug and TV connector; 6 ft. long. Net Each................ **53c**

en No. 8875 (Not Illus.)—Cheater extension 6 ft. cord hanked in descriptive sleeve. Type -1 is red plastic parallel cord with male and female TV connectors. Net Each........... **38c**

ALUMINUM GROUND WIRE

en No. 8018 (Not Illus.) Solid 8 AWG soft annealed aluminum wire packaged in counter disers of ten 50 ft. connected coils, or spools of 500 and 1000 ft. lengths. Spooled wire is marked every ft. for easy measuring. **500′ Counter Dispenser,** Net.................................**$ 7.75**

Coil, Net..............**90c** **500′ Spool,** Net........**$7.75** **1000′ Spool,** Net **14.25**

ade Mark: Permohm, Weldohm and Celluline of Belden; Copperweld of Copperweld Steel Co.

476X-59B

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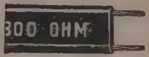

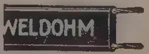

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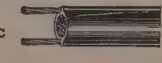

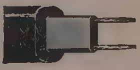
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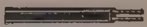

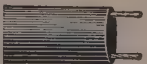
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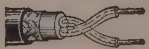

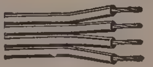
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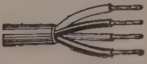

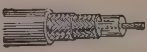
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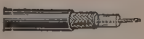

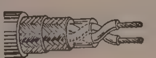
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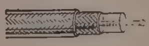

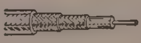
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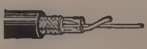

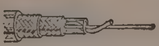
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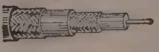
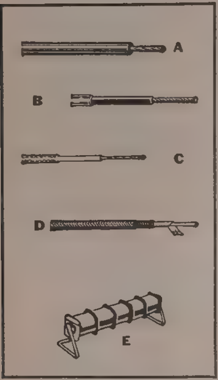


Belden Electronic Wire and Cable



HOOK-UP WIRE KITS (FIG. E)

Assortments of hook-up wire colors in portable metal dispenser rack. One spool of each color is supplied.

Beld. No.	Wire Type and No.	Colors†	Net Kit
8818	20 (Solid) 8941-25*	1-6, 9, 10	$5.04
8819	20 (Solid) 8941-100‡	2, 5, 6, 9, 10	8.10
8820	20 (Strnd.) 8943-25*	1-6, 9, 10	5.04
8821	20 (Strnd.) 8943-100‡	2, 5, 6, 9, 10	8.25
8822	20 (Solid) 8529-25*	1-10	4.40
8823	20 (Solid) 8529-100‡	2, 5, 6, 9, 10	4.80
8824	20 (Strnd.) 8523-25*	1-6, 9, 10	3.84
8825	20 (Strnd.) 8507-100‡	9, 14, 15, 16, 17	7.63
8826	22 (Strnd.) 8508-100‡	9, 14, 15, 16, 17	7.48
8827	22 (Strnd.) 8518-100‡	2, 5, 6, 9, 10	8.10
8828	26 (Strnd.) 8302-25*	1-10	16.50
8829	24 (Strnd.) 8303-25*	1-10	19.50
8830	22 (Strnd.) 8306-25*	1-10	22.50
8831	20 (Strnd.) 8307-25*	1-10	26.50

*25 ft. spools. ‡100 ft. spools.

†COLOR CODING

Specify color when ordering. First color in stripe combination is body color; second and third are stripes.

Code No.	Color Combination
1	Brown
2	Red
3	Orange
4	Yellow
5	Green
6	Light Blue
7	Violet (purple)
8	Gray (slate)
9	White
10	Black
11	Tan
12	Pink
13	Dark Blue
14	White/Black
15	White/Red
16	White/Green
17	White/Yellow
18	White/Blue
19	White/Brown
20	White/Orange
21	White/Gray
22	White/Violet
23	White/Black/Red
24	White/Black/Green
25	White/Black/Yellow
26	White/Black/Blue
27	White/Black/Brown
28	White/Black/Orange
29	White/Black/Gray
30	White/Black/Violet

® Trade Mark: Teflon of DuPont.

HOOK-UP AND LEAD WIRES

MILITARY SPECIFICATION MIL-W-76A TYPE MW PLASTIC (FIG. A)

Formerly Type SRIR JAN-C-76. Tinned copper conductor, vinyl insulated; ozone and flame resistant; inert to most chemicals, oils and solvents; 1000 v., 80° C.

Belden No.	Type Designation	AWG and (Stranding)	Nom. O.D.	Stock Colors†	Net Each, Spool of				
					Solid Colors			Striped Colors	
					25′	100′	1000′	100′	1000′
8525	MW-C-24-(7)-U	24 (7 x 32)	.058″	1-22	......	$0.93	$ 5.25	$1.05	$ 6.40
8530	MW-C-22-(1)-U	22 (Solid)	.059″	1-22*	$0.36	.74	4.60	.86	5.70
8524	MW-C-22-(7)-U	22 (7 x 30)	.064″	1-30*	.39	.93	5.85	1.05	7.00
8529	MW-C-20-(1)-U	20 (Solid)	.066″	1-22*	.44	.96	5.55	1.08	6.70
8523	MW-C-20-(7)-U	20 (10 x 30)	.072″	1-30*	.48	1.05	7.15	1.17	8.25
8522	MW-C-18-(16)-U	18 (16 x 30)	.081″	1-22*	.48	1.23	9.10	1.35	10.20
8521	MW-C-16-(19)-U	16 (19 x 29)	.096″	1-10	......	1.58	11.85	......	......
8520	MW-C-14-(19)-U	14 (19 x 27)	.111″	1-6, 9, 10	......	2.00	15.15	......	......
8527	MW-C-12-(19)-U	12 (19 x 25)	.130″	1-6, 9, 10	......	2.67	22.80	......	......
8526	None	10 (37 x 26)	.151″	1-6, 9, 10	......	6.35	51.60	......	......

*Available in colors 1-13 in 25′ spools.

MILITARY SPECIFICATION MIL-5086A TYPE I (FIG. B)

Tinned copper conductor vinyl insulated, nylon jacket. Aircraft primary wire has excellent resistance to abrasion, moisture, flame, fungus, oils and fuels; rated 600 v., 105° C.

Belden No.	Type Designation	AWG and (Stranding)	Nom. O.D.	Stock Colors†	Solid 25′	Solid 100′	Solid 1000′	Striped 100′	Striped 1000′
8541	AN-22	22 (19 x 34)	.068″	9	......	$1.65	$11.65	......	......
8542	AN-20	20 (19 x 32)	.078″	9	......	1.80	13.20	......	......
8543	AN-18	18 (19 x 30)	.088″	9	......	2.10	17.70	......	......
8544	AN-16	16 (19 x 29)	.098″	9	......	2.40	20.85	......	......

MILITARY SPECIFICATION MIL-W-16878C (FORMERLY MIL-W-16878B)

TYPE B VINYL (FIG. A)

Tinned copper, vinyl insulated for general purpose wiring with high resistance to moisture and solvents; 600 v., 105° C.

Belden No.	Type Designation	AWG and (Stranding)	Nom. O.D.	Stock Colors†	Solid 25′	Solid 100′	Solid 1000′	Striped 100′	Striped 1000′
8505	B-26	26 (7 x 34)	.039″	9, 14-22	......	$1.16	$ 7.70	$1.28	$ 8.80
8509	B-24	24 (19 x 36)	.045″	9, 14-22	......	1.26	8.80	1.38	9.90
8504	B-24	24 (7 x 32)	.044″	9, 14-22	......	1.11	7.00	1.23	8.10
8508	B-22	22 (19 x 34)	.052″	9, 14-22	......	1.40	9.15	1.52	10.25
8503	B-22	22 (7 x 30)	.050″	1-10, 14-22	......	1.16	7.85	1.28	9.00
8507	B-20	20 (19 x 32)	.060″	9, 14-22	......	1.43	10.60	1.55	11.70
8502	B-20	20 (7 x 28)	.058″	9, 14-22	......	1.20	8.55	1.32	9.70
8506	B-18	18 (19 x 30)	.070″	9, 14-22	......	1.56	11.95	1.68	13.05
8501	B-18	18 (7 x 26)	.068″	9, 14-22	......	1.38	10.20	1.50	11.35
8500	B-16	16 (19 x 29)	.077″	9, 14-22	......	1.65	13.00	1.77	14.10

TYPE B VINYL-NYLON (FIG. B)

Same as above but with additional nylon jacket for added abrasion resistance. Rated 600 v., 115° C.

Belden No.	Type Designation	AWG and (Stranding)	Nom. O.D.	Stock Colors†	Solid 25′	Solid 100′	Solid 1000′	Striped 100′	Striped 1000′
8515	B-26	26 (7 x 34)	.044″	9, 14-22	......	$1.32	$ 9.35	$1.44	$10.50
8519	B-24	24 (19 x 36)	.050″	1-10, 14-22	......	1.40	10.65	1.52	11.75
8514	B-24	24 (7 x 32)	.049″	1-10, 14-22	......	1.28	8.80	1.40	9.90
8518	B-22	22 (19 x 34)	.057″	1-10, 14-22	......	1.62	11.35	1.74	12.45
8513	B-22	22 (7 x 30)	.055″	1-10, 14-22	......	1.37	9.75	1.49	10.90
8517	B-20	20 (19 x 32)	.065″	1-10, 14-22	......	1.67	12.90	1.80	14.[illegible]
8512	B-20	20 (7 x 28)	.063″	1-10, 14-22	......	1.46	10.80	1.58	11.95
8516	B-18	18 (19 x 30)	.075″	9, 14-22	......	1.80	14.35	1.92	15.45
8511	B-18	18 (7 x 26)	.073″	9, 14-22	......	1.62	12.60	1.74	13.75
8510	B-16	16 (19 x 29)	.082″	9, 14-22	......	1.98	15.75	2.10	16.90

TYPES E AND EE TEFLON® (FIG. A)

Excellent physical and electrical properties are retained over a temperature range of −90° C to +200° C. Ideal for component leads and connecting wire under severe operating environments. Chemically inert, unaffected by weather or moisture, nonflammable, nonshrinkable, highly abrasion resistant, dielectrically strong and has low dissipation factor. Type E rated 600 v., 200° C. Type EE rated 1000 v., 200° C. **Write for information and prices on striped insulation.**

Belden No.	Mil. Type	AWG and (Stranding)	Nom. O.D.	Colors†	Net Each, Spool of					
					25′	50′	100′	250′	500′	1000′
8300	E-30	30 (7 x 38)	.033″	1-10	$1.50	$ 2.80	$ 5.25	$10.31	$20.63	$ 41.25
8301	E-28	28 (7 x 36)	.036″	1-10	1.65	2.95	5.50	10.69	21.38	42.75
8302	E-26	26 (7 x 34)	.041″	1-10	1.65	3.15	6.00	12.19	24.38	48.75
8303	E-24	24 (19 x 36)	.046″	1-10	1.95	3.55	6.75	13.31	26.62	53.25
8304	E-24	24 (7 x 32)	.045″	1-10	1.90	3.40	6.45	13.31	26.62	53.25
8305	E-22	22 (7 x 30)	.051″	1-10	2.25	4.00	7.50	15.94	31.88	63.75
8306	E-22	22 (19 x 34)	.052″	1-10	2.25	4.00	7.50	15.94	31.88	63.75
8307	E-20	20 (19 x 32)	.060″	1-10	2.65	4.80	9.00	19.13	38.25	76.50
8308	E-20	20 (10 x 30)	.060″	1-10	2.65	4.80	9.00	18.75	37.50	75.00
8309	E-18	18 (19 x 30)	.072″	1-10	3.00	5.65	10.80	24.00	48.00	96.00
8310	E-16	16 (19 x 29)	.085″	1-10	4.15	8.25	15.00	34.45	68.90	137.80
8320	EE-30	30 (7 x 38)	.043″	1-10	2.05	3.85	7.35	15.31	30.63	61.25
8321	EE-28	28 (7 x 36)	.046″	1-10	2.25	4.20	8.10	16.31	32.62	65.25
8322	EE-26	26 (7 x 34)	.050″	1-10	2.05	3.75	7.15	14.59	29.18	58.35
8323	EE-24	24 (19 x 36)	.056″	1-10	2.40	4.50	8.65	17.25	34.50	69.00
8324	EE-24	24 (7 x 32)	.055″	1-10	2.40	4.50	8.65	17.25	34.50	69.00
8325	EE-22	22 (7 x 30)	.061″	1-10	2.65	4.90	9.30	19.13	38.26	76.50
8326	EE-22	22 (19 x 34)	.062″	1-10	2.65	4.95	9.55	19.54	39.08	78.15
8327	EE-20	20 (19 x 32)	.070″	1-10	3.15	6.00	11.65	23.25	46.50	93.00
8328	EE-20	20 (10 x 30)	.070″	1-10	3.15	6.15	12.00	24.09	48.18	96.35
8329	EE-18	18 (19 x 30)	.081″	1-10	3.75	6.90	13.50	28.80	57.60	115.20
8330	EE-16	16 (19 x 29)	.090″	1-10	4.80	9.35	18.00	41.34	82.68	165.35

GENERAL PURPOSE AND UL-600V HOOK-UP

Fig. A Type UL-600V-105C: Tinned copper conductor vinyl insulated; 105° C. **Fig. C Type UL-600V-90C:** Tinned copper conductor vinyl insulated with cotton braid, lacquered; 90° C. **Fig. D General Purpose Type:** Tinned copper, cellulose acetate wrap, cellulose acetate braid lacquered; insulation resistance 200 megohms/ft. DC nominal; nominal breakdown 1000 volts.

Belden No.	Fig.	AWG and (Stranding)	Nom. O.D.	Stock Colors†	Net Each, Spool of			
					25′	100′	500′	1000′
8920	A	22 (7 x 30)	.095″	1-5, 9, 10, 13	....	$1.23	....	$ 9.75
8919	A	20 (10 x 30)	.102″	1-5, 9, 10, 13	....	1.34	....	10.50
8918	A	18 (16 x 30)	.112″	1-5, 9, 10, 13	....	1.65	....	12.75
8917	A	16 (26 x 30)	.126″	1-5, 9, 10, 13	....	2.10	$ 9.00	....
8916	A	14 (41 x 30)	.141″	1-5, 9, 10, 13	....	2.65	10.50	....
8937	C	22 (7 x 30)	.091″	1-5, 9, 10, 13	....	1.38	....	10.65
8936	C	20 (10 x 30)	.098″	1-5, 9, 10, 13	....	1.50	....	12.00
8935	C	18 (16 x 30)	.113″	1-5, 9, 10, 13	....	1.88	....	15.00
8934	C	16 (26 x 30)	.126″	1-5, 9, 10, 13	....	2.25	10.15	....
8933	C	14 (41 x 30)	.177″	1-5, 9, 10, 13	....	3.45	15.75	....
8941	D	20 (Solid)	.072″	1-6, 9, 10	$0.63	1.62	....	12.00
8943	D	20 (10 x 30)	.076″	1-6, 9, 10	.63	1.65	....	12.75
8945	D	18 (Solid)	.080″	2, 4-6, 9, 10	.60	1.73	....	14.20
8947	D	18 (16 x 30)	.087″	2, 4-6, 9, 10	.63	1.88	....	15.90
8942	D	16 (26 x 30)	.099″	2, 5, 10	....	2.20	....	18.75
8938	D	14 (41 x 30)	.115″	2, 10	....	2.80	12.55	....

3elden Electronic Wire and Cable

SHIELDED HOOK-UP AND GRID WIRES

lden No. 8885 (Fig. A)—Tinned copper 20 AWG, 10 x 30 stranded conductor rubber insulated, cellu- e acetate braid lacquered, tinned copper braid shield, O.D., .117″ nominal. Rated 1500 v. working;)0 v. breakdown. Capacitance, 80 μμf/t. **15′ Spool,** Net.................................. **69c**
Spool, Net.......... **$1.02** **100′ Spool,** Net .... **$3.15** **500′ Spool,** Net...... **$14.63**

lden No. 8886 (Fig. B)—Tinned copper 20 AWG, 10 x 30 stranded conductor vinyl insulated with ned copper braid shield. O.D., .124″ nominal. Rated 3000 v. working; 7000 v. breakdown. Capaci- ice, 82 μμf/ft. **15′ Spool,** Net.................................. **66c**
Spool, Net.............. **96c** **100′ Spool,** Net........ **$3.05** **500′ Spool,** Net...... **$13.88**

lden No. 8206 (Fig. C)—Tinned copper 18 AWG, 7 x 27 stranded conductor rubber insulated, tinned pper braid shield. O.D., .156″. **15′ Spool,** Net.................................. **75c**
Spool, Net.......... **$2.03** **100′ Spool,** Net........ **$3.60** **250′ Spool,** Net........ **$7.90**

TEST PROD WIRE (FIG. D)

tremely limp and flexible wire has high dielectric strength. Tinned copper 18 AWG, 65 x 36 stranded iductor is rubber insulated; specify red or black.

lden lo.	Nom. O.D.	Breakdown Volts	Suggested Work Volts	Net Each, Spool of 10′	14′*	25′	100′	500′	1000′
399	.140″	20,000	5,000	$0.44	$0.56	$0.75	$2.20	$ 9.40	$18.75
398	.230″	29,000	10,000	.62		1.17	3.45	14.95	....

ft. of red; 7 ft. of black.

DUPLEX PRIMARY WIRE (FIG. E)

ined copper conductors vinyl insulated, parallel in chrome vinyl jacket.

Belden No.	AWG and (Stranding)	Nom. O.D. Inch	Color Coding	Net Each, Spool of 100′	500′
8677	16 (19 x 29)	.164 x .276	Brown and Red	$ 6.00	$30.00
8675	14 (19 x 27)	.189 x .326	Brown and Red	7.65	38.25
8673	12 (19 x 25)	.214 x .384	Brown and Red	10.65	53.25

PRIMARY WIRE

ined copper conductors rubber insulated, cotton braid lacquered. **No. 8656 (Fig. G):** Has additional ned copper braid shield overall.

elden No.	Fig.	AWG and (Stranding)	Nom. O.D. Inch	Color Coding	Net, 100′ Spool
8652	F	16 (19 x 29)	.137	Black with White Tracer	$3.60
8651	F	14 (19 x 27)	.159	Green with 2 White Tracers	4.50
8650	F	12 (19 x 25)	.199	Red with 3 White Tracers	6.00
8656	G	16 (19 x 29)	.170	Blue	5.25

PARALLEL LAMP CORD (FIG. H)

light duty power supply and extensions; stranded copper conductors in parallel insulated with one iductor polarity ribbed. Rated 300 volts 60° C. Specify color.

lden lo.	UL Type	Insulation	AWG and (Stranding)	Nom. O.D. Inch	Colors	Net Each, Spool of 25′	100′	250′
162	SP-1	Rubber	18 (41 x 34)	.123 x .223	Brown, Ivory	$1.02	$2.95	$6.65
388	SPT-1	Plastic	18 (41 x 34)	.110 x .214	Brown, Ivory, Silver Gray	.86	2.33	.....

BRAIDED TINNED COPPER SHIELDING AND BONDING CABLE (FIG. I)

lden No.	Stranding	Nom. I.D.	Net Each, Spool of 10′	50′	250′	Belden No.	Stranding	Nom. I.D.	Net Each, Spool of 10′	50′	250′
660	96 x 34	1/8″	$0.51	$1.50	$6.75	8661	192 x 34	3/8″	$0.68	$2.35	$10.50
668	120 x 34	11/64″	.57	1.95	9.00	8669	336 x 34	1/2″	1.20	5.50	24.90
663	160 x 34	1/4″	.60	1.90	8.25	8662	576 x 34	25/64″	1.58	7.05	33.75

SOLID TINNED COPPER BUS BAR WIRE (FIG. J)

elden No.	AWG	Nom. O.D., In.	Net Each, Spool 100′	1000′	Belden No.	AWG	Nom. O.D., In.	Net Each, Spool 100′	1000′
1021	22	.025	$0.53	$3.75	8013	16	.050	$1.10	$ 9.45
1020	20	.032	.60	4.50	8012	14	.064	1.50	13.20
3019	18	.040	.75	6.00	8011	12	.080	2.10	19.50

MISCELLANEOUS SPECIAL DUTY WIRES

iden No. 8666 Ignition Wire (Fig. K)—7 mm. type of tinned Copperweld® 20 AWG, 7 x 28 stranded, ar Polysil® plastic insulation. O.D., .280″ nom. **100′ Spool,** Net.......................... **$5.85**

iden No. 8868 High Voltage CRT Lead (Fig. L)—Tinned copper 22 AWG, 7 x 30 stranded, poly- ylene insulation, red vinyl jacket, extra flexible and small. Rated 40,000 v. breakdown; 20,000 v. rking. O.D., .150″ nominal. **25′ Spool,** Net.. **$0.75**
′ Spool, Net.......................... **$1.90** **500′ Spool,** Net.......................... **9.00**

iden No. 8817 Litz Wire (Fig. M)—Copper 5 x 44 stranded conductor, Celenamel® insulated, nylon ap. O.D., .008″ nominal. **100′ Spool,** Net.. **30c**

iden No. 8127 Voice Coil Lead (Fig. N)—Braided 25 AWG bare copper, 32 x 40 stranded. O.D., .024″. **Spool,** Net.......................... **38c** **500′ Spool,** Net.......................... **$5.25**

lden No. 8200 Lead-in Wire (Fig. P)—Tinned copper 18 AWG, 7 x 27 stranded, black rubber insu- ed. O.D., .126″ nom. **100′ Spool,** Net **$1.65** **500′ Spool,** Net **$6.45** **1000′ Spool,** Net **$12.15**

iden No. 8014 Indoor Aerial Wire (Fig. Q)—Tinned copper 25 AWG, 13 x 36 stranded, chrome vinyl ulation. O.D., .044″ nom. **25′ Spool,** Net.............. **38c** **500′ Spool,** Net.......... **$2.70**

EXTERIOR AERIAL WIRE

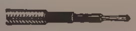
. R: Stranded bare copper. **Fig. S:** Solid copper, HF Formvar insulated.

lden No.	Fig.	AWG and (Stranding)	Nom. O.D.	Net Each, Spool of 50′	75′	100′	200′	500′	1000′
002	R	16 (7 x 24)	.060″	$0.68	$0.83	$1.05	....	....	$ 9.75
000	R	14 (7 x 22)	.076″	.90	1.20	1.58	....	....	14.65
009	S	14 (Solid)	.067″	....	....	1.73	$3.30	$ 7.35	....
008	S	12 (Solid)	.084″	....	....	2.55	4.65	10.90	....

MAGNET WIRE (FIG. T)

	Beldenamel (E)						Nyclad (HNC)					
	¼ lb. Spool			½ lb. Spool			½ lb. Spool			1 lb. Spool		
ze	Belden No.	Lgth., Ft.	Net Each	Belden No.	Lgth., Ft.	Net Each	Belden No.	Lgth., Ft.	Net Each	Belden No.	Lgth., Ft.	Net Each
4	......	......	......	8047	40	$0.63	8059	40	$0.62	8073	80	$1.17
6	......	......	......	8048	63	.62	8060	63	.62	8074	126	1.17
8	......	......	......	8049	100	.62	8061	100	.63	8075	199	1.20
0	......	......	......	8050	160	.65	8062	157	.66	8076	315	1.25
2	......	......	......	8051	254	.68	8063	250	.69	8077	501	1.31
4	......	......	......	8052	[illegible]04	.71	8064	396	.72	8078	793	1.38
6	......	......	......	8053	645	.75	8065	630	.78	8079	1260	1.52
8	8040	510	$0.47	8054	1020	.78	8066	995	.86	8080	1990	1.65
0	8041	807	.51	8055	1615	.87	8067	1570	.95	8081	3140	1.85
2	8042	1257	.51	8056	2515	.89	8068	2440	1.01	8082	4880	1.95
4	8043	2030	.56	8057	4060	.96	8069	3930	1.19	8083	7860	2.25
6	8044	3200	.65	8058	6400	1.13	8070	6200	1.43	8084	12400	2.82
8	8045	5070	.81	......	......	......	8071	9700	1.77	8085	19400	3.57
0	8046	8050	1.16	......	......	......	8072	16050	2.79	8086	32100	5.61

rade Mark: Celenamel and Polysil of Belden; Copperweld of Copperweld Steel Co.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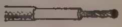
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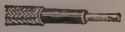
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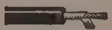
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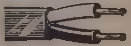
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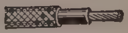
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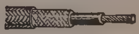
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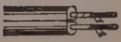
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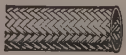
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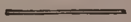
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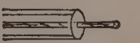
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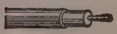
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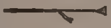
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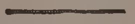
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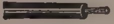
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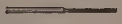
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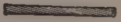
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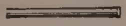
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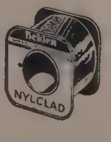


T

AMPHENOL RG/U Coaxial Cables

POLYETHYELENE DIELECTRIC RG/U COAXIAL CABLES

Amphenol polyethylene and Teflon cables are fully approved and produced to rigid military specifications. Proper size, quality and centering of inner conductors, absence of voids in, and accuracy of outside diameter of the dielectric; proper size and quality of braided shielding; close centering of outer jacket; correct overall diameter and proper cable markings are other features which insure utmost efficiency and dependability. Strict end-to-end uniformity of these cables is accomplished by precision plastic extrusion, accurate temperature control, constant process inspection and micrometer gauging standards. The maximum dielectric qualities of polyethylene are fully utilized. The bending radius is ten times the outside cable diameter and is maintained over a wide range of temperatures. Low moisture absorption qualities.

Amphenol Number*	MIL Number	Nom. Imp., Ohms	Max. RMS Volts	Net Per Thousand Feet		
				1-99′	100-499′	500-999′
21-294s	RG-5B/U	50	3000	$ 307.00	$ 281.00	$ 253.00
21-330cw	RG-6A/U	75	2700	213.00	195.00	175.50
21-004c	RG-8/U	52	5000	135.00	123.00	123.00
21-290c	RG-8A/U	52	5000	162.00	148.00	148.00
21-005s	RG-9/U	51	5000	320.00	292.00	263.00
21-231s	RG-9A/U	51	5000	391.00	358.00	322.50
21-332s	RG-9B/U	50	5000	415.00	380.00	342.00
21-338c	RG-10A/U	52	5000	262.00	240.00	216.00
21-007t†	RG-11/U	75	5000	129.00	118.25	118.25
21-296t	RG-11A/U	75	5000	147.00	134.00	134.00
21-340t	RG-12A/U	75	5000	253.00	231.50	208.50
21-009t	RG-13/U	74	5000	204.00	187.00	168.00
21-334t	RG-13A/U	74	5000	218.00	200.00	180.00
21-336c	RG-14A/U	52	7000	337.00	308.00	277.50
21-013c	RG-17/U	52	11000	637.00	583.00	525.00
21-298c	RG-17A/U	52	11000	664.00	608.00	547.50
21-300c	RG-18A/U	52	11000	892.00	816.00	735.00
21-303c	RG-19A/U	52	14000	1119.00	1025.00	992.50
21-305c	RG-20A/U	52	14000	1392.00	1275.00	1147.00
21-308n	RG-21A/U	53	2700	350.00	320.00	288.75
21-038c	RG-22/U	95	1000	173.00	158.00	142.50
21-310c	RG-22B/U	95	1000	293.00	268.00	241.50
21-792c	RG-34B/U	75	6500	380.00	348.00	313.50
21-793c	RG-35B/U	75	10000	910.00	833.00	750.00
21-802s	RG-55B/U	53.5	1900	109.00	100.50	90.50
21-313c	RG-57A/U	95	3000	417.00	381.00	343.50
21-024c	RG-58/U	53.5	1900	57.00	52.00	52.00
21-199t	RG-58A/U	50	1900	58.00	53.00	53.00
21-316t	RG-58C/U	50	1900	66.00	60.00	60.00
21-025cw	RG-59/U	73	2300	61.00	55.75	55.75

Amphenol Number*	MIL Number	Nom. Imp., Ohms	Max. RMS Volts	Net Per Thousand Feet		
				1-99′	100-499′	500-999′
21-794cw	RG-59B/U	75	2300	$ 72.00	$ 65.75	$ 65.75
21-026cw	RG-62/U	93	750	66.00	60.75	60.75
21-318cw	RG-62A/U	93	750	73.00	66.50	66.50
21-771cw	RG-62B/U	93	750	76.00	70.00	70.00
21-027cw	RG-63/U	125	1000	142.00	130.00	130.00
21-320cw	RG-63B/U	125	1000	172.00	157.50	141.75
21-723cw	RG-71A/U	93	750	120.00	110.00	99.00
21-804cw	RG-71B/U	93	750	111.00	101.00	101.00
21-321c	RG-74A/U	52	7000	573.00	525.00	472.50
21-325cw	RG-79B/U	125	1000	337.00	308.00	277.00
21-327t	RG-108A/U	78	1000	89.00	81.50	73.50
21-329c	RG-111A/U	95	1000	500.00	458.00	412.50
21-440cw	RG-114/U	185	1000	155.00	141.00	141.00
21-520cw	RG-114A/U	185	1000	173.00	158.00	142.50
21-441t	RG-122/U	50	1900	63.00	57.50	51.75
21-467t	RG-149/U	75	5000	191.00	175.00	157.50
21-720c	RG-164/U	75	10000	655.00	600.00	540.00
21-598cw	RG-174/U	50	1500	52.00	48.00	48.00
21-790s	RG-212/U	50	3000	307.00	281.00	253.00
21-779c	RG-213/U	50	5000	162.00	148.00	148.00
21-780c	RG-214/U	50	5000	415.00	380.00	342.00
21-781c	RG-215/U	50	5000	262.00	240.00	216.00
21-782t	RG-216/U	75	5000	218.00	200.00	180.00
21-783c	RG-217/U	50	7000	337.00	308.00	277.50
21-784c	RG-218/U	50	11000	664.00	608.00	547.50
21-785c	RG-219/U	50	11000	892.00	816.00	735.00
21-786c	RG-220/U	50	14000	1119.00	1025.00	922.50
21-787c	RG-221/U	50	14000	1119.00	1025.00	922.50
21-791n	RG-222/U	50	2700	350.00	320.00	288.75
21-788s	RG-223/U	50	1900	162.00	148.25	133.50

Note: Type of "Inner Conductor" is denoted by the suffix to the Amphenol Number. ***s**—Silvered copper; **cw**—Copperweld; **c**—Copper; **t**—Tinned copper; **n**—Nichrome. †Add suffix **-101** for sweeptesting.

TEFLON, FIBERGLAS, KEL-F DIELECTRIC RG/U COAXIAL CABLES

Extremely low loss and high voltage breakdown. Covering the Teflon are one or two silver coated or plain copper shield braids and two wrappings of Teflon tape. Jacket consists of fiberglas braids impregnated with silicone varnish.

Amphenol Number	MIL Number	Nom. Imp. Ohms	Jacket Dia.	Type Jacket*	Shields#		O.D. of Dielectric†	Inner Conductor#	V.P. %	Cap. μμf/ft.	Max. Op. Volts	Net Per Foot	
					1st	2nd						1-99′	100-249′
421-250	RG-87A/U	50	.425″	V	S	S	.280″TF	7/20S	69.5	29.5	5000	$2.67	$2.40
421-641	RG-115/U	50	.375″	V	S	S	.250″TT	7/21S	70.0	29.5	5000	2.67	2.40
421-699	RG-115A/U	50	.415″	V	S	S	.250″TT	7/21S	70.0	29.5	4000	2.67	2.40
421-378	RG-116/U	50	.425″	V	S	S	.280″TF	7/20S	69.5	29.5	5000	3.62	3.25
421-377	RG-117/U	50	.730″	V	C	....	.620″TF	.188C	69.5	29.0	7000	9.58	8.62
421-398	RG-119/U	50	.465″	V	C	C	.332″TF	.102C	69.5	29.0	6000	4.43	3.99
421-379	RG-140/U	75	.233″	V	S	....	.146″TF	.025SCW	69.5	21.0	2300	2.00	1.80
421-382	RG-141/U	50	.190″	V	S	....	.116″TF	.0359SCW	69.5	28.5	1900	1.65	1.48
421-139	RG-141A/U	50	.190″	V	S	....	.116″TF	.039SCW	69.5	28.5	1900	1.65	1.48
421-385	RG-142/U	50	.206″	V	S	S	.116″TF	.0359SCW	69.5	28.5	1900	1.77	1.59
421-140	RG-142A/U	50	.206″	V	S	S	.116″TF	.039SCW	69.5	28.5	1900	1.77	1.59
421-388	RG-143/U	50	.325″	V	S	S	.185″TF	.057SCW	69.5	28.5	3000	2.58	2.32
421-141	RG-143A/U	50	.325″	V	S	S	.185″TF	.059SCW	69.5	28.5	3000	2.58	2.32
421-391	RG-144/U	75	.410″	V	S	....	.285″TF	7/25SCW	69.5	20.5	5000	3.37	3.03
421-148	RG-178A/U	50	.075″	KEL-F	S	....	.034″TF	7/38SCW	69.5	29.0	1000	.242	.218
421-149	RG-179A/U	75	.105″	KEL-F	S	....	.063″TF	7/38SCW	69.5	19.5	1200	.375	.338
421-144	RG-180/U	93	.141″	KEL-F	S	....	.103″TF	7/38SCW	69.5	15.5	850	.51	.459
421-147	RG-180A/U	95	.145″	KEL-F	S	....	.102″TF	7/38SCW	69.5	15.0	1500	.54	.486
421-106	RG-187/U	75	.110″	VII	S	....	.063″TF	7/38SCW	69.5	19.5	1200	.475	.428
421-105	RG-188/U	50	.110″	VII	S	....	.060″TF	7/.0067SCW	69.5	29.0	1200	.433	.39
421-111	RG-195/U	95	.155″	VII	S	....	.102″TF	7/38SCW	69.5	15.0	1500	.725	.653
421-109	RG-196/U	50	.080″	VII	S	....	.034″TF	7/38SCW	69.5	29.0	1000	.38	.342
421-131	RG-211/U	50	.730″	V	C	....	.620″TF	.190C	69.5	29.0	7000	9.58	8.62
421-135	RG-225/U	50	.430″	V	S	S	.285″TT	7/.0312S	69.5	29.5	5000	2.67	2.40
421-136	RG-226/U	50	.500″	V	C	C	.370″TT	19/.0254S	70.0	29.5	7000	5.66	5.10
421-137	RG-227/U	50	.430″	V	S	S	.285″TF	7/.0312S	69.5	29.5	5000	3.62	3.25

Note: Operating Temperature Limits: Fiberglas, −55° C to +250° C; Teflon, −55° C to +200° C; KEL-F, −55° C to +135° C. ***V** -Fiberglas; **KEL-F**—Non-Military designation; **VII**—Teflon. †**TT** -Teflon Tape; **TF**—Teflon. #**S**—Silver-coated copper; **C**—Copper; **CW**—Copperweld; **SCW**—Silver-coated copperweld.

POLYFOAM COAXIAL COMMUNITY TV CABLES

Amphenol Number	RG Type	Imped. Ohms	Inner Conductor	Jacket	μμf/ Foot	Max. V. RMS	Net Per Thousand Feet			
							1-99′	100-499′	500-999′	1000-2999
621-100	11/U	75	#14 AWG Solid Copper	Black Polyethylene	16.5	3000	$144.00	$132.00	$132.00	$118.75
621-100-101*†	11/U	75	#14 AWG Solid Copper	Black Polyethylene	16.5	3000	159.00	159.00	159.00	131.00
621-102-101*†	11/U triax.	75	#14 AWG Solid Copper	Black Polyethylene	16.5	3000	259.00	259.00	259.00	....
621-111	8/U	50	7/19 Stranded Copper	Black Vinyl Type I	26.0	3000	156.00	143.00	143.00	129.00
621-700†	59/U	73	#22 AWG Solid Copperweld	Black Vinyl Type IIa	17.0	1000	58.00	53.00	53.00	48.00
621-701†	59/U	73	#22 AWG Solid Copperweld	Black Vinyl Type I	17.0	1000	50.00	45.00	45.00	40.75
621-715‡	59/U	73	#22 AWG Solid Copperweld	Black Polyethylene	17.0	1000	50.00	45.00	45.00	40.75

*Sweep-tested for VHF. Available in one standard put-up of minimum 1,000 foot lengths. Reels average approximately 15,000 feet.

†Can be used with UHF Series connectors. ‡Can be used with UHF Series and BNC connectors.

Walsco Radio-TV Chemicals

CEMENT

†	Size	For	Net
1	1¾ oz.	Speaker, cabinet repairs	$ 0.45
2	2 oz.		.48
4	4 oz.		.72
8	8 oz.		1.26
16	1 pt.		2.19
3	1 gal.		7.77
4	5 gal.		33.00
2	2 oz.	Porous and non-porous materials	.48
3	1 gal.		12.39
2	2 oz.	Grille cloth, turntable felts, etc.	.48
3	1 gal.		11.10
2	2 oz.	Plastic repair	.48
4	4 oz.		.72
8	8 oz.		1.26
3	1 gal.		9.75
2	2 oz.	Rubber, wood, plastics, glass, metal, fabrics, etc.	.48
8	8 oz.		1.26
3	1 gal.		12.60
2	2 oz.	Resistors	.48
2	2 oz.	Phenolics (Bakelite). Also cementing phenolics to plastics, wood, metal, etc.	.48
3	1 gal.		21.00
2	2 oz.	Lucite, plexiglass, etc.	.48
3	1 gal.		9.90
2	2 oz.	Fastening rubber to wood or metals	.48
4	4 oz.		.72
3	1 gal.		8.10

ies 50, Radio Cement. Series 55, Vi-
te Cement. Series 53, Fabric Cement.
es 40, Plastic Cement. Series 67, Plio-
l Cement. Series 77, Electric and Re-
r Cement. Series 66, Bakelite Cement.
es 65, Lucite Cement. Series 56, Rub-
Cement.

POLYSTYRENE CEMENT AND COIL DOPE

lds" polystyrene. Ideal for UHF coil
ing. Shrinks on when drying to hold
lings firmly. Electrical performance
fected. Waterproof.

sco No. 57-02—2 oz. bottle. Net. **48c**
sco No. 57-04—4 oz. bottle. Net. **72c**
sco No. 57-33—1 gal. can. Net. **$10.80**

CONTACTENE

icates as it cleans. Anti-oxidant. Re-
es oxide, dirt, grease and corrosion.
ect metal contacts.

sco No. 80-02—2 oz. bot. Net **$0.54**
sco No. 80-04—4 oz. bot. Net. **.66**
sco No. 80-08—8 oz. bot. Net. **1.14**
sco No. 80-16—1 pint can. Net **1.50**

Spray Cans

sco No. 80-06—6 oz. can. Net. **$1.05**
sco No. 80-12—16 oz. can. Net **1.50**
sco No. 989—Injector. Net... **.45**

"NO-OX®"

-gumming chemical that dissolves cor-
n. For maintenance of volume and
controls, attenuators, relays, jacks,
Lubricates Oilite bearings. Lubricates
protects slide wires.

sco No. 100-01—1 oz. bot. Net **$0.66**
sco No. 100-02—2 oz. bot. Net. **.96**
sco No. 100-16—16 oz. bot. Net **7.50**
sco No. 100-06—6 oz. spray can **2.63**
available in 1 and 5 gal. cans.

CARBON TETRACHLORIDE

urpose cleaning fluid, 100% pure.
-explosive, non-inflammable.

sco No. 111-04—4 oz. bot. Net **$ 0.54**
sco No. 111-16—16 oz. bot. Net **1.26**
sco No. 111-33—1 gal. can. Net **5.37**

"WALSCOFLUX"

-corrosive, instant-acting solder flux.
e of pure resin.

sco No. 220-02—2 oz. bottle with
icator. Net Each............... **48c**

ANTI-CORONA LACQUER

ent arcing. Will withstand over 15,000
.

sco No. 195-02—2 oz. bot. Net. **$ 0.72**
sco No. 195-16—16 oz. can. Net **4.50**
sco No. 195-33—1 gal. can. Net. **15.90**

Spray Cans

co No. 195-06—6 oz. can. Net.. **$1.29**
co No. 195-12—16 oz. can. Net. **2.44**

AIR-DRY WRINKLE VARNISH

For wood or metal. Will air-dry at room temperature. Order gray as Series 146 and black as Series 145.

Walsco No. 146-02—2 oz. jar. Net. **$ 0.66**
Walsco No. 146-16—16 oz. can. Net **2.81**
Walsco No. 146-33—1 gal. can. Net **13.20**

Spray Cans

Walsco No. 146-06—6 oz. can. Net.. **$1.69**
Walsco No. 146-12—16 oz. can. Net. **2.06**

SOLVENTS AND THINNERS

No.†	Size	For	Net
201-02	2 oz.	Plastic Cement Radio Cement	$ 0.45
201-04	4 oz.		.72
201-08	8 oz.		.81
201-16	16 oz.		1.32
201-33	1 gal.		4.80
202-02	2 oz.	Polystyrene Cement	.45
202-04	4 oz.		.66
202-33	1 gal.		3.69
203-02	2 oz.	Vinylite Cement	.45
204-04	4 oz.	Rubber Cement Wrinkle Varnish Fabric Cement	.66
204-33	1 gal.		3.69

†Series 201, Cement Solvent. Series 202, Polystyrene Solvent. Series 203, Lacquer Thinner. Series 204, Thinner. **Solvent will discolor Plastic and Radio Cements; use Lacquer Thinner.**

"TUNERLUB"

Forms strong film to protect high frequency switch contacts in TV and FM tuners.

Walsco No. 26-01—1¾ oz. tube. Net **54c**

WALSCOLUB-B

Electrically neutral lubricant that prevents corrosion. Does not change electrical properties of conductors or insulators. Superior to any graphite compound. Clings to metal surfaces.

Walsco No. 22-01—1¾ oz. tube. Net **54c**
Also available in 1 and 5 gal. cans.

"LUBRIPLATE"

A grease type protective lubricant that prevents rust and corrosion. Forms a coherent film. Perfect for electrical and electronic applications.

Walsco No. 23-02—2 oz. tube. Net. . **54c**
Also available in 1 and 5 lb. cans.

LUBRICATOR

For applying light greases and oils to inaccessible spots.

Walsco No. 988—Lubricator. Net.... **54c**

FREEZ-MIST

Cools instantly, pinpointing faulty capacitors, resistors, transistors, cold solder and oxidized junctions, etc., due to temperature variances. Isolates intermittent components. Saves hours locating defective intermittent circuit components caused by temperature changes. Spray can.

Walsco No. 214-12—16 oz. can. Net **$2.44**

"NO-SLIP"

Increases friction of pulley belts and cords. Fast drying. Brushes on.

Walsco No. 260-02—2 oz. bot. Net... **48c**

C-R TUBECOAT

Quick-drying coating for TV picture tubes. Patches scratches and peeled-off areas. Brush attached to cap.

Walsco No. 199-02—2 oz. bot. Net. **$ 0.72**
Walsco No. 199-33—1 gal. can. Net **11.94**

Spray Cans

Walsco No. 199-06—6 oz. can. Net.. **$1.29**
Walsco No. 199-12—16 oz. can. Net. **2.44**

SCRATCH REMOVING POLISH

Does not change shade of finish. Comes in "Dark" (Series 231) for walnut, mahogany, etc., or "Light" (Series 232) for maple, pine, oak, etc.; same prices.

Walsco No. 231-04—4 oz. bot. Net **$0.39**
Walsco No. 231-08—8 oz. bot. Net **.60**
Walsco No. 231-33—1 gal. can. Net **3.60**

SUPER POLISH

A concentrated white cream wax polish. Forms a rich, lustrous, non-oily film.

Walsco No. 230-04—4 oz. bottle. Net. **39c**
Walsco No. 230-08—8 oz. bottle. Net. **60c**

INSULATING VARNISH

Highly resistant to heat, acid, oil and grease. For radio coils, transformers, solenoids, motors, etc.

Walsco No. 190-02—2 oz. bot. Net **$0.51**

DIAL CORD FRICTION STICK

Prevents slipping of dial cord or belt. In stick form.

Walsco No. 259-01—Single stick. Net **18c**

CHLOROTHENE

Similar to carbon-tet, but practically nontoxic. Dissolves grease, dirt, oils, tars and waxes from any electronic component, switches, chassis, etc.

Walsco No. 113-04—4 oz. bot. Net **$0.57**
Walsco No. 113-16—16 oz. bot. Net **1.32**
Walsco No. 113-33—1 gal. can. Net **7.08**
Walsco No. 113-34—5 gal. can. Net **31.80**

TUNERCLEAN

Finest UHF and VHF Tuner contact cleaner on the market. Cleans and prevents corrosion.

Walsco No. 105-01—1 oz. bot. Net **$0.57**
Walsco No. 105-02—2 oz. bot. Net **.96**
Walsco No. 105-16—1 pint can. Net **7.50**
Walsco No. 105-33—1 gal. can. Net **23.70**

WALSCOCLEAR (FORMULA 91)

Neutralizes static electricity in plastics; ideal for vinyl plastic recording, TV lenses, optical systems, etc.

Walsco No. 91-04—4 oz. bottle. Net. **33c**

RH CLEANER

Cleans and protects tape and wire recording heads. Dissolves scum, loosens lint and dirt.

Walsco No. 93-01—1 oz. bottle. Net. **57c**

K-T-K (KON-TROL-KLEEN)

Protects as it cleans all radio, TV, and similar electronic rotating controls, switches, contacts, etc.

Walsco No. 107-04—4 oz. bot. Net **$0.75**
Walsco No. 107-16—16 oz. can. Net **1.95**
Walsco No. 107-33—1 gal. can. Net **9.00**

RED CORONA DOPE

Stops high voltage "corona." Protects against shorts. Dries instantly.

Walsco No. 198-02—2 oz. bot. Net **$0.72**
Walsco No. 198-16—1 pint can. Net **4.50**
Walsco No. 198-33—1 gal. can. Net **21.06**

WALSCO GLYPTAL

An insulating material. Resists heat, oils and acid. Spray, brush or dip on.

Walsco No. 134-02—2 oz. bot. Net **$0.57**
Walsco No. 134-08—8 oz. bot. Net **1.77**
Walsco No. 134-33—1 gal. can. Net **15.00**

WALSCO STRIPVAR

Instantly softens Formvar, Formex, and similar insulation.

Walsco No. 251-02—2 oz. bot. Net **$0.60**
Walsco No. 251-16—1 pint can. Net **3.30**
Walsco No. 251-33—1 gal. can. Net **15.51**

HAM-R-TONE LACQUER

Gives a "factory-like" finish to any metal surface. In 6 oz. spray can.

Walsco No. 148-06—Gray. Net... **$1.24**
Walsco No. 149-06—Blue. Net... **1.24**

ANTI-FUNGUS LACQUER

Meets JAN-C-173 specifications.

Walsco No. 135-02—2 oz. bot. Net **$0.57**
Walsco No. 135-16—1 pint can. Net **2.10**
Walsco No. 135-33—1 gal. can. Net **13.20**

SILICONE RESIN LACQUER

Protects printed circuits after repair or replacement of parts. Fast air drying.

Walsco No. 120-02—2 oz. bot. Net **$1.17**
Walsco No. 120-06—6 oz. spray can.
Net............................ **2.44**

RESIN LACQUER SOLVENT

Use as a thinner or as a remover.

Walsco No. 205-02—2 oz. bot. Net... **36c**

ACRY-SPRAY

Weather-proofs antenna terminals, lead-in wires, high voltage connections, etc. Excellent for TV masts and towers. Puts rust-resistant finish on all metal surfaces. In 12 oz. spray can.

Walsco No. 140-12—Clear. Net..... **$1.42**
Walsco No. 141-12—Aluminum. Net **1.42**

WALSCO ALUMA-FLUX

Makes aluminum soldering simple, easy and permanent.

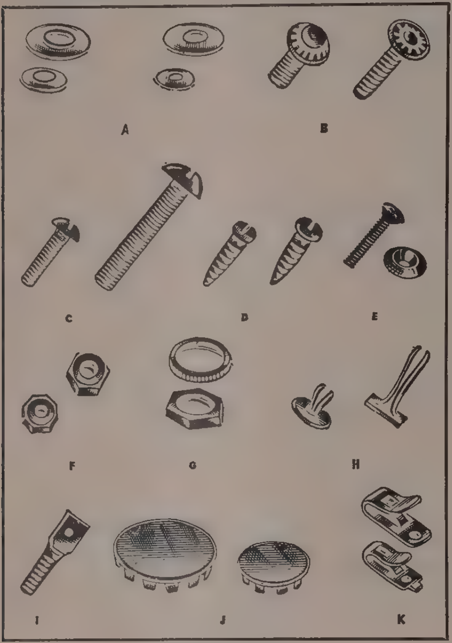
Walsco No. 221-02—2 oz. can. Net **$1.49**

STANDARD SOLDERING PASTE

For use in all electrical work, sheet metal work, etc. Very fast acting.

Walsco No. 226-02—2 oz. can. Net.. **42c**

Walsco "50" & "100" Line Hardware



THE "50" LINE

Small quantities of always-needed service supplies, packaged in small re-usable plastic containers with a hinged top. Clear plastic box lets you see what and how much is inside. Each box clearly labeled. Quantities indicated in tables below.
Walsco "50" Line Hardware Assortment—Net Each...... **36c**

THE "100" PACK

Especially packaged for industrial and commercial users in the new, handsome carton. Parts are packed 100 to carton.

INSULATING WASHERS (FIG. A)

Precision made from vulcanized phenolic fiber. Assures proper insulation between components and controls or the chassis and other metal parts. Flat or extruded in quantities of 100 only. Overall thickness of washers is 3/32" (extruded), and 1/32" (flat).

Description	Size, Inches			"100" Line	
	O.D.	I.D.	B.*	Number	Net/Pkg.
#6 screw, extruded	5/16	.140	3/16	7856-C	86c
#6 screw, flat	5/16	.140	....	7836-C	42c
#8 screw, extruded	3/8	.169	1/4	7858-C	86c
#8 screw, flat	3/8	.166	....	7838-C	42c
#10 screw, extruded	3/8	.195	.308	7860-C	94c
#10 screw, flat	3/8	.195	....	7840-C	42c
1/4" screw, extruded	1/2	.250	11/32	7862-C	94c
1/4" screw, flat	1/2	.250	....	7842-C	46c
3/8" screw, extruded	5/8	.380	1/2	7864-C	99c
3/8" screw, flat	5/8	.380	....	7844-C	76c

*Outside diameter of extrusion.

ORNAMENTAL HEAD SCREWS (FIG. B)

Finished in lustrous bronze, stamped with a rosette design. For use when mounting screws are visible from exterior of cabinet.

Description	"50" Line		"100" Line	
	Number	Quantity	Number	Net/Pkg.
#6-32 x 3/4" screw	8252-F	20	8252-C	$1.07
#6-32 x 1" screw	8253-F	20	8253-C	1.17
#8-32 x 1 1/4" screw	8255-F	12	8255-C	1.60

ROUND-HEAD MACHINE SCREWS (FIG. C)

Suit electronic technician's need for fasteners. Round-head steel, nickel-plated.

Description	"50" Line		"100" Line	
	Number	Quantity	Number	Net/Pkg.
#2-56 x 3/8"	8023-F	40	8023-C	$0.47
#2-56 x 1/2"	8024-F	40	8024-C	.48
#4-36 x 1/4"	8032-F	40	8032-C	.49
#4-36 x 1/2"	8034-F	35	8034-C	.52
#4-36 x 3/4"	8036-F	30	8036-C	.61

ROUND-HEAD MACHINE SCREWS (CONTINUED)

Description	"50" Line		"100" Line	
	Number	Quantity	Number	Net/Pkg.
#4-40 x 1/4"	8042-F	40	8042-C	.49
#4-40 x 3/8"	....	....	8043-C	.49
#4-40 x 1/2"	8044-F	35	8044-C	.53
#6-32 x 1/4"	8062-F	40	8062-C	.53
#6-32 x 3/8"	8063-F	35	8063-C	.53
#6-32 x 1/2"	8064-F	30	8064-C	.62
#6-32 x 3/4"	8066-F	30	8066-C	.73
#6-32 x 1"	....	....	8068-C	.83
#6-32 x 2"	8078-F	15	8078-C	1.51
#8-32 x 1/4"	8082-F	30	8082-C	.70
#8-32 x 3/8"	8083-F	25	8083-C	.75
#8-32 x 1/2"	8084-F	25	8084-C	.81
#8-32 x 3/4"	8086-F	20	8086-C	.93
#8-32 x 1"	....	....	8088-C	1.06
#10-32 x 1/2"	8104-F	20	8104-C	.95
#10-32 x 3/4"	8106-F	20	8106-C	1.12
#10-32 x 1"	8108-F	15	8108-C	1.25

SHEET METAL AND SELF-TAPPING SCREWS (FIG. D)

Hex-head, pointed type A. Easier than riveting, faster than machine screws. Cut their own threads in metal or plastic. No nu or tapping necessary. Replaces rivets, eyelets, etc.

Description	"50" Line		"100" Line	
	Number	Quantity	Number	Net/Pkg.
#6 x 1/4"	8362-F	30	8362-C	$0.97
#6 x 3/8"	8363-F	25	8363-C	1.01
#6 x 1/2"	8364-F	25	8364-C	1.07
#6 x 3/4"	8366-F	20	8366-C	1.30
#6 x 1"	8368-F	20	8368-C	1.36
#8 x 1/4"	8382-F	20	8382-C	1.16
#8 x 3/8"	8383-F	20	8383-C	1.21
#8 x 1/2"	8384-F	20	8384-C	1.25
#8 x 3/4"	8386-F	15	8386-C	1.31
#8 x 1"	8388-F	15	8388-C	1.59
#10 x 3/8"	8403-F	15	8403-C	1.43
#10 x 1/2"	8404-F	15	8404-C	1.75
#10 x 3/4"	8406-F	12	8406-C	2.20

RACK SCREWS AND CUP WASHERS (FIG. E)

Nickel-plated oval-head screws and cup washers give a finishe appearance to panels mounted on racks or cabinets.

SCREWS

Description	"50" Line		"100" Line	
	Number	Quantity	Number	Net/Pkg.
#6-32 x 5/8"	8265-F	30	8265-C	$0.68
#8-32 x 5/8"	8269-F	25	8269-C	.87
#10-32 x 3/4"	8273-F	20	8273-C	1.12

WASHERS

Description	"50" Line		"100" Line	
	Number	Quantity	Number	Net/Pkg.
#6 (7/16" O.D.)	7806-F	45	7806-C	$0.40
#8 (1/2" O.D.)	7808-F	45	7808-C	.42
#10 (9/16" O.D.)	7810-F	35	7810-C	.56

HEX NUTS (FIG. F)

Popular "small pattern" hex nuts, preferred in the electronics i dustry. Precision tapped, corrosion resistant and neat appearance.

SMALL PATTERN NICKEL-PLATED STEEL

Description	Size, Inches		"50" Line		"100" Line	
	Width	Thk.	Number	Qty.	Number	Net/Pkg.
#2-56	3/16	1/16	8802-F	30	8802-C	$0.69
#4-40	3/16	1/16	8804-F	30	8804-C	.66
#6-32	1/4	3/32	8806-F	30	8806-C	.69
#8-32	5/16	7/64	8808-F	30	8808-C	.73
#10-32	5/16	7/64	8810-F	25	8810-C	.96

BRASS HEX NUTS

Description	Width	Thk.	Number	Qty.	Number	Net/Pkg.
#6-32	1/4	3/32	8846-F	20	8846-C	$1.16
#8-32	5/16	7/64	8848-F	12	8848-C	1.40
#10-32	3/8	1/8	....	....	8850-C	1.54

SPECIAL MOUNTING NUTS (FIG. G)

For panel mounting components such as potentiometers, volum controls, jacks, toggle switches, etc. 8923 and 8924 are nickel plated steel; 8926 is nickel-plated brass.

Description	"50" Line		"100" Line	
	Number	Qty.	Number	Net/Pkg.
3/8-32 Vol. control hex nut	8923-F	12	8923-C	$2.21
15/32-32 Toggle sw. hex nut	8924-F	[redacted]	8924-C	3.14
.473 Toggle switch ring nut	8926-F	[redacted]	8926-C	4.50

SNAP-IN TRIMOUNTS (FIG. H)

For light assembly. Snap through holes as in back covers, di scales, chassis, etc.

Description	"50" Line		"100" Line	
	Number	Quantity	Number	Net/Pkg.
For 1/8" opening	7373-F	20	7373-C	$1.11
For 5/32" opening	7375-F	18	7375-C	1.45
For 5/32" opening*	7377-F	15	7377-C	1.90

*Rectangular, 3/16" x 11/32".

Walsco “50” & “100” Line Hardware

SPADE BOLTS (FIG. I)

astening condensers, coils, shields, etc. Type 8572 is straight as a ⁹⁄₁₆" long thread. Type 8573 is ⁵⁄₁₆" long. Both types are verall, have 6-32 thread and hole for 6-32 screw or ⅛" rivet.

escription	Hole Dia.	D*	“100 Line”	
			Number	Net/Pkg.
32 Straight	.141"	¼"	8572-C	$1.22
32 Offset	.141"	¹⁵⁄₆₄"	8573-C	2.54

le width.

SNAP-HOLE PLUGS (FIG. J)

st and quickest way to cover an opening in the chassis or . Spring flanges hold polished, nickel-plated flat-head button in place. Use plugs to seal adjustments, cover unused , etc.

Description	“50” Line		“100” Line	
	Number	Quantity	Number	Net/Pkg.
iole diameter ¼".	7306-F	8	7306-C	$2.14
iole diameter ⅜".	7308-F	8	7308-C	2.86
iole diameter ½".	7310-F	6	7310-C	3.04
iole diameter ⅝".	7312-F	6	7312-C	3.15
iole diameter ¾".	7314-F	5	7314-C	3.60
iole diameter 1".	7316-F	4	7316-C	4.95

SPRING CONNECTOR CLIPS (FIG. K)

ols are required for connecting or disconnecting wires to these as they hold wire firmly by pressure. Useful in "breadboard" . Made of spring brass or phosphor bronze.

e	Description	“50” Line		“100” Line	
		Number	Quantity	Number	Net/Pkg.
5	#16 ga. and under	7592-F	15	7592-C	$2.06
	#14 ga. and under	7594-F	12	7594-C	2.18

TERMINAL LUGS

y-tinned lugs for assembly, experimentation, and repair.

Description	“100” Line	
	Number	Net/Pkg.
crew size #6. (Fig. L)	7116-C	$1.23
crew size #8. (Fig. L)	7118-C	1.28
crew size #6. (Fig. M)	7126-C	.97
crew size #8. (Fig. M)	7128-C	1.27
crew size #6. (Fig. N)	7136-C	1.20
crew size #8. (Fig. N)	7138-C	1.19
crew size #6. (Fig. O)	7146-C	1.18
crew size #8. (Fig. O)	7148-C	1.14
crew size #10. (Fig. O)	7149-C	1.48
crew size #6. (Fig. P)	7156-C	1.18
crew size #8. (Fig. P)	7158-C	1.18
crew size #6. (Fig. Q)	7166-C	.98
crew size #8. (Fig. Q)	7168-C	.87
crew size #10. (Fig. Q)	7169-C	.84
crew size #10. (Fig. R)	7179-C	1.04
crew size #10. (Fig. S)	7189-C	1.70

SOLDERLESS TERMINAL LUGS (FIG. T)

-over type. Fits #8 and #10 screws. Makes a positive connec- without soldering.

oth #8 and #10 screw sizes.	7199-C	$1.64

RADIO KNOB SPRINGS (FIG. U)

ern method of fastening knobs to shafts. Made of the finest (tempered spring). Carefully selected to meet the needs of lectronic service shop.

Description	“50 Line”		“100” Line	
	Number	Quantity	Number	Net/Pkg.
o knob spring.	7492-F	20	7492-C	$1.33
o knob spring.	7493-F	20	7493-C	1.10
o knob spring.	7495-F	15	7495-C	1.50

RUBBER CABINET FEET

e of synthetic rubber, these cabinet feet are available in two —screw or tack. Screw type is easily installed with wood s, metal screws or tacks, and is supplied with wood screws e "50" and "100" Line packages. The tack type is the same ically, but has handy tacks molded into feet.

Description	“50” Line		“100” Line	
	Number	Quantity	Number	Net/Pkg.
w type, ⅜"* (Fig. V)	7052-F	8	7052-C	$0.91
w type, ½" (Fig. V)	7054-F	8	7054-C	1.46
w type, ⅝" (Fig. V)	7056-F	8	7056-C	2.22
v type, ¾" (Fig. V)	....	....	7058-C	2.81
type, ⅜" (Fig. W)	....	....	7071-C	1.85
type, ½" (Fig. W)	....	....	7072-C	1.94

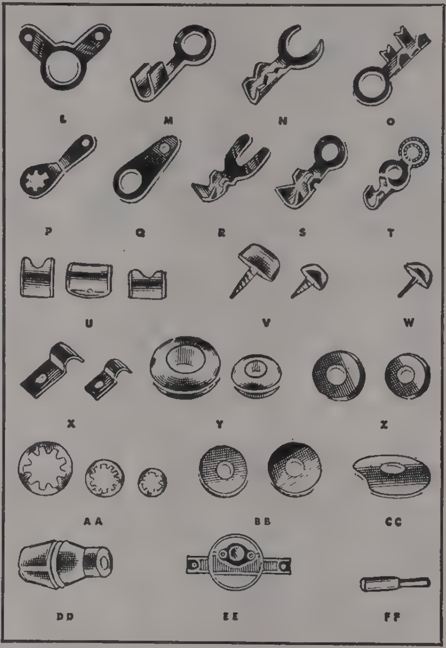
meter.

VINYL GROMMETS (FIG. Y)

l grommets are soft like rubber, but have much greater resist- to age, temperatures, oils and chemicals. All grommets below or chassis up to ¹⁄₁₆" in thickness.

Size, Inches			“50” Line		“100” Line	
.*	Dia.†	Thickness	Number	Quantity	Number	Net/Pkg.
3	⅛	³⁄₁₆	7030-F	14	7030-C	$1.00
	³⁄₁₆	⁷⁄₃₂	7032-F	12	7032-C	1.25
	¼	¼	7034-F	12	7034-C	1.36
	⅜	¼	7036-F	10	7036-C	1.46
5	½	⁹⁄₃₂	7038-F	8	7038-C	2.27

side diameter. †Inside diameter.



CABLE CLAMPS (FIG. X)

For cable or wire groups from ⅛" to ⁵⁄₁₆" in diameter.

Hole Size*	Description	“50” Line		“100” Line	
		Number	Quantity	Number	Net/Pkg.
#6	⅛" to ³⁄₁₆"†	7502-F	25	7502-C	$0.98
#8	³⁄₁₆" to ¼"†	7503-F	20	7503-C	1.11
#8	¼" to ⁵⁄₁₆"†	7505-F	16	7505-C	2.08

*Mounting. †Cable diameter.

METAL WASHERS (FIG. Z)

Precision-cut steel washers, nickel-plated, with concentric center-hole. Sizes most frequently used in electronic assemblies.

Screw Size	Size, Inches			“50” Line		“100” Line	
	I.D.	O.D.	Thick.	Number	Quantity	Number	Net/Pkg.
#4	.125	⁹⁄₃₂	¹⁄₃₂	7874-F	80	7874-C	30c
#6	.140	⅜	¹⁄₃₂	7876-F	80	7876-C	28c
#8	.171	⅜	¹⁄₃₂	7878-F	80	7878-C	29c
#10	.203	⁷⁄₁₆	¹⁄₃₂	7880-F	70	7880-C	29c

LOCK WASHERS (FIG. AA)

Made of steel selected for its elasticity and hardness. Lock washers dig into panels and chassis to lock nuts firmly in place, with a one-way ratchet-type action. Cadmium-plated, internal type.

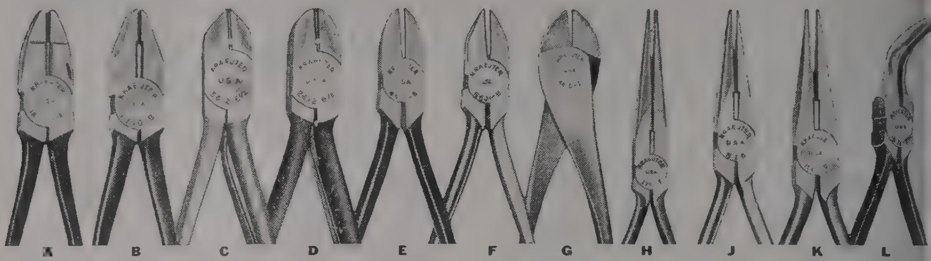
Screw Size	Description	“50” Line		“100” Line	
		Number	Qty.	Number	Net/Pkg.
#2	Lock washer, .180" O.D.	7922-F	35	7922-C	$0.72
#4	Lock washer, .260" O.D.	7924-F	50	7924-C	.46
#6	Lock washer, .280" O.D.	7926-F	50	7926-C	.46
#8	Lock washer, .330" O.D.	7928-F	50	7928-C	.50
#10	Lock washer, .375" O.D.	7930-F	45	7930-C	.50
¼"	Lock washer, .470" O.D.	....	....	7932-C	.65
⅜"	Lock washer, .690" O.D.	....	....	7935-C	1.10

ELECTRONIC HARDWARE

Description	“50” Line		“100” Line	
	Number	Qty.	Number	Net/Pkg.
Cord strain reliefs. (Fig. DD)	7048-F	4	7048-C	$6.59
Spring friction washers. (Fig. CC)	....	....	7752-C	2.07
Felt knob washers.* (Fig. BB)	7760-F	40	7760-C	.40
Twin-lead wiring nails. (Fig. EE)	7565-F	35	7565-C	.56
Phone tips. (Fig. FF)	7645-F	10	7645-C	2.10

*Brown.

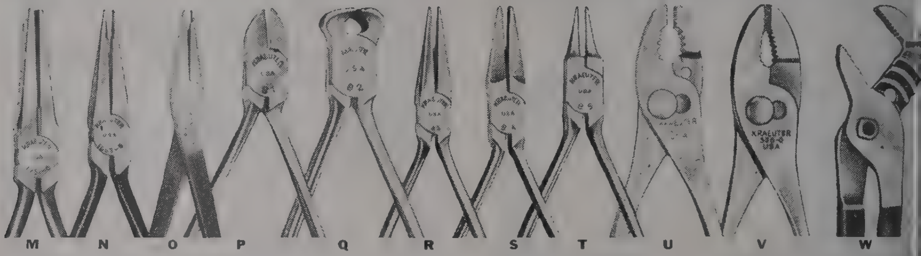
Kraeuter Pliers, Tools



Kraeuter Number	Size, In.	Fig.	Description	Net Each
1802	8½	A	Lineman's oval N.E. head sidecuts	$4.34
1830	4	B	Electrician's side cutting pliers	2.30
1830	5	B	Electrician's side cutting pliers	2.38
1830	6½	B	Electrician's side cutting pliers	2.55
1830	7	B	Electrician's side cutting pliers	2.85
1830	8	B	Electrician's side cutting pliers	3.23
5612*	6½	C	Needle pt. diag. stripping, notched	3.70
2612	6½	D	Wire-stripping diagonals, spring	3.19
4501	4½	E	Diagonal "oblique" cutting pliers	2.21

Kraeuter Number	Size, In.	Fig.	Description	Net Each
4501	5	E	Diagonal "oblique" cutting pliers	$2.3
4501	6	E	Diagonal "oblique" cutting pliers	2.7
5601*	4½	F	Needle point diagonal cutting pliers	2.8
5601*	5	F	Needle point diagonal cutting pliers	2.9
5601*	6	F	Needle point diagonal cutting pliers	3.2
4610	5	G	Heavy-duty diagonal cutting pliers	2.3
4610	7	G	Heavy-duty diagonal cutting pliers	2.7
1781	7	H	Extra-long chain nose pliers	3.3

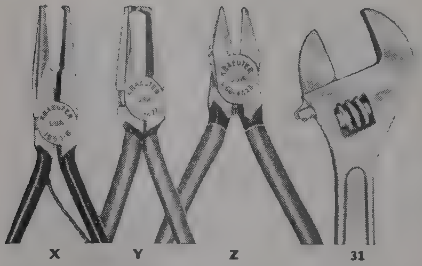
*Available with full polished or cushion grip handles; speci



Kraeuter Number	Size, In.	Fig.	Description	Net Each
825	5	J	Medium nose needle point pliers	$3.06
826	6	J	Long nose needle point pliers	3.19
827	7	J	Extra long needle point with cutter	3.57
1661	6	K	Long chain needle nose pliers	2.72
1631	5½	L	Curved needle or snipe nose pliers	2.85
1751	6	M	Long flat nose pliers with cutters	2.93
1663	6	N	Radio-ignition nose-cutting pliers	2.89
71	8	O	Short jaw nose-cutting pliers	3.36
81*	4½	P	Jewelers' diagonal cutters	2.47

Kraeuter Number	Size, In.	Fig.	Description	Net Each
82*	4½	Q	Jewelers' end-cutting nippers	$2.9
83*	4½	R	Jewelers' chain nose pliers	2.4
84*	4½	S	Jewelers' flat nose pliers	2.4
85*	4½	T	Jewelers' round nose and jaw pliers	2.4
40	6	U	Thin nose pliers, nickel plated	1.4
156	6	V	Chrome plated combination pliers	.8
156	8	V	Chrome plated combination pliers	1.0
156	10	V	Chrome plated combination pliers	1.3
356	6	V	"Griptite" combination pliers	1.9

*Available with full polished or Cushion Grip handles; specif



Kraeuter Number	Size, In.	Fig.	Description	Net Each
356	8	V	"Griptite" combination pliers	$2.47
710	10	W	Tongue-N-Groove joint pliers	2.55
CG1650	6	X	Transverse end-cutting pliers, spring	3.19
CG5627	5½	Y	End-cutting resistor pliers	2.98
C-CG4625	5	Z	Needle point diagonal cutting pliers	3.32

ALLOY STEEL ADJUSTABLE WRENCHES

Kraeuter Number	Size, In.	Net Each	Kraeuter Number	Size, In.	Net Each
31	4	$2.04	31	10	$3.02
31	6	2.04	31	12	4.42
31	8	2.38	31	15	6.72

VINYLITE CUSHION GRIPS "CG" HANDLES at no extra cost

Cushion Grips give better "feel", are more comfortable to use and allow more accurate control. Factory applied, will not crack, chip or peel; withstand rough use. Variety of colors makes tools easy to identify. You can "reach for the color". Available on all Kraeuter tools at no extra cost —add "CG" to front of tool number.

Cross Coil Spring

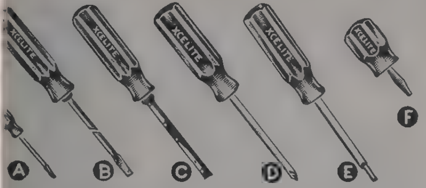
CROSS COIL SPRING

The following Cushion Grip pliers are available with Cross Co Spring. When ordering, specify prefix "C" with tool numbe

Kraeuter Number	Size, In.	Fig.	Net Each	Kraeuter Number	Size, In.	Fig.	Net Each
C-CG1661	6	K	$2.98	C-CG4501	4½	E	$2.47
C-CG1663	6	N	3.15	C-CG4501	5	E	2.64
C-CG1781	7	H	3.57	C-CG4501	6	E	3.02

552-59A

XCELITE Quality Service Tools



UND BLADES, NICKEL PLATED—POCKET STYLE FIG. A

elite No.	Handle Diam.	Handle Length	Blade Diam.	Blade Length	Overall Length	Net Each
322	½″	2″	3/32″	2″	4″	$0.18
323	½″	2″	3/32″	3″	5″	.27
324	½″	2″	3/32″	4″	6″	.27
31	½″	2″	⅛″	2″	4″	.18
33	½″	2″	⅛″	3″	5″	.27
34½	½″	2″	⅛″	4″	6″	.27

ROUND BLADES, POLISHED—FIG. B

32	¾″	2½″	⅛″	2″	4½″	$0.33
34	¾″	2½″	⅛″	4″	6½″	.39
36	¾″	2½″	⅛″	6″	8½″	.42
38	¾″	2½″	⅛″	8″	10½″	.54
310	¾″	2½″	⅛″	10″	12½″	.60
323	¾″	2½″	5/32″	3″	5½″	.45
324	¾″	2½″	5/32″	4″	6½″	.45
325	¾″	2½″	5/32″	5″	7½″	.45
328	¾″	2½″	5/32″	8″	10½″	.60
163	⅞″	3⅝″	3/16″	3″	6⅝″	.57
164	⅞″	3⅝″	3/16″	4″	7⅝″	.60
166	⅞″	3⅝″	3/16″	6″	9⅝″	.69
168	⅞″	3⅝″	3/16″	8″	11⅝″	.78
1610	⅞″	3⅝″	3/16″	10″	13⅝″	.87
42	1″	3⅞″	¼″	2″	6″	.66
44	1″	3⅞″	¼″	4″	8″	.75
46	1″	3⅞″	¼″	6″	10″	.78
48	1″	3⅞″	¼″	8″	12″	.84
410	1″	3⅞″	¼″	10″	14″	.90
164	1 1/16″	4¼″	5/16″	4″	8¼″	.87
166	1 1/16″	4¼″	5/16″	6″	10¼″	.99
168	1 1/16″	4¼″	5/16″	8″	12¼″	1.05

PHILLIPS SCREWDRIVERS—FIG. D

elite No.	Description	Blade Length	Overall Length	Net Each
100	Phillips No. 0 Point	2″	4½″	$0.45
2S	Phillips No. 0 Point	2″ Pocket	Clip Type	.39
101	Phillips No. 1 Point	3″	6⅜″	.69
108	Phillips No. 1 Point	6″	10″	.75
1010	Phillips No. 1 Point	10″	13¾″	1.05
1020	Phillips No. 2 Point	10″	13¾″	1.17
102	Phillips No. 2 Point	4″	7¾″	.87
103	Phillips No. 3 Point	6″	10″	1.17
104	Phillips No. 4 Point	8″	12″	1.47
-101	Phillips No. 1 Point	Short Stubby Type		.63
-102	Phillips No. 2 Point	Short Stubby Type		.69

REED AND PRINCE SCREWDRIVERS

perfect fit on Reed and Prince screws (similar to Phillips
ils; but for best results require their own driver).
le No. **RP-101**—3/16″ x 3″ blade. Net Each............ 66c
le No. **RP-102**—¼″ x 4″ blade. Net Each............$0.84
le No. **RP-103**—5/16″ x 6″ blade. Net Each............ 1.11

CLUTCH HEAD SCREWDRIVERS—FIG. E

different types offered. **Type G** for ordinary service work.
e **A**, however, will hold the screw by turning counter clockwise.
used in original assembly work.

ype G No.	Type A No.	Tip Size	Blade Diam.	Blade Length	Net Each
G-183	A-183	⅛″	3/16″	3″	$0.72
G-5324	A-5324	5/32″	¼″	4″	.81
G-3164	A-3164	3/16″	¼″	4″	.81
G-146	A-146	¼″	5/16″	6″	1.05
G-5166	A-5166	5/16″	⅜″	6″	1.29
G-3324	....	3/32″	⅛″	4″	.72

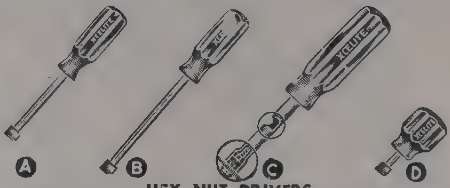
TUBBY SCREWDRIVERS, POLISHED BLADES—FIG. F

elite No.	Handle Diam.	Handle Length	Blade Diam.	Blade Length	Overall Length	Net Each
3161	1⅛″	1½″	3/16″	1¼″	2¾″	$0.45
141	1⅜″	2″	¼″	1¼″	3¼″	.51
5161	1⅜″	2″	5/16″	1¼″	3¼″	.51

BERYLLIUM-COPPER SCREWDRIVERS

lite beryllium-copper screwdrivers are non-magnetic—no dis-
ance to TV image. Better fatigue resistance than steel. Num-
BR-1410FC is for Focalizer adjustment on TV sets.

elite No.	Blade Size, In.	Net Each	Xcelite No.	Blade Size, In.	Net Each
-186	⅛ x 6	$0.75	BR-146	¼ x 6	$1.65
-1810	⅛ x 10	.81	BR-148	¼ x 8	1.77
3168	3/16 x 8	1.32	BR-1410FC	¼ x 10	1.95



HEX NUT DRIVERS

Xcelite No.	Figure	Nut Size	Handle	Overall Length	Net Each
4	A	⅛″	Red	5″	72c
5	A	5/32″	Amber	5″	72c
6	A	3/16″	Black	6″	72c
7	A	7/32″	Brown	6″	72c
8	A	¼″	Red	6″	72c
9	A	9/32″	Orange	6″	72c
10	A	5/16″	Amber	6″	72c
11	A	11/32″	Green	6″	72c
12	A	⅜″	Blue	6″	72c
14	A	7/16″	Brown	7½″	90c
16	A	½″	Red	7½″	90c
A-6	B	3/16″	Black	9″	81c
A-7	B	7/32″	Brown	9″	81c
A-8	B	¼″	Red	9″	81c
A-9	B	9/32″	Orange	9″	81c
A-10	B	5/16″	Amber	9″	81c
A-11	B	11/32″	Green	9″	81c
A-12	B	⅜″	Blue	9″	81c
S-8	D	¼″	Red	3¼″	57c
S-10	D	5/16″	Amber	3¼″	57c
S-12	D	⅜″	Blue	3¼″	57c

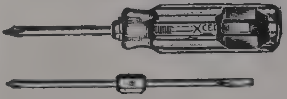
HOLLOW SHAFT NUT DRIVERS—FIG. C

Xcelite No.	Nut Size	Handle	Depth of Hole	Overall Length	Net Each
HS-8	¼″	Red	5″	6⅞″	$0.87
HS-10	5/16″	Amber	5″	6⅞″	.87
HS-11	11/32″	Green	5″	6⅞″	.90
HS-12	⅜″	Blue	5″	6⅞″	.90
HS-14	7/16″	Brown	5″	6⅞″	1.02
HS-16	½″	Red	5″	6⅞″	1.05
HS-18	9/16″	Orange	5″	6⅞″	1.08
HS-20	⅝″	Amber	5″	6⅞″	1.23
AHS-14	7/16″	Brown	....	10¾″	1.14
AHS-16	½″	Red	....	10¾″	1.17
AHS-18	9/16″	Orange	....	10¾″	1.20
AHS-20	⅝″	Amber	....	10¾″	1.38

POCKET STYLE NUT DRIVERS

Clips into pocket; 5 popular sizes. Net Each............ 48c

Xcelite No.	Nut Size	Handle	Xcelite No.	Nut Size	Handle
P-3	3/32″	....	P-8	¼″	Red
P-4	⅛″	Red	P-10	5/16″	Amber
P-5	5/32″	Amber	P-12	⅜″	Blue



DUAL PURPOSE SCREWDRIVER KITS

Large (1 3/16″ x 4 1/16″) hollow to receive the dual-blade screwdriver units. Screwdriver blades are made of SAE 6150 chrome vanadium electric furnace steel.

Blade No. RB-1—3/16″ regular, No. 1 Phillips. Net Each.... 78c
Blade No. RB-2—¼″ regular, No. 2 Phillips. Net Each.....78c
Blade No. RB-3—5/16″ regular, No. 3 Phillips. Net Each.....78c
Handle No. 25—To fit any of above blades. Net Each.....60c
Nos. CR-1, CR-2, CR-3—Combination of blade and handle. (RB-1 and handle will be CR-1 combination). Net Ea. $1.38

REVERSIBLE DUAL CLUTCH BLADES

Use with No. 25 handle.

Blade No. GB-1—3/16″ one end, 5/32″ other end; both "G" type Clutch blades. Net Each........ 87c
Blade No. GB-2—5/16″ one end, ¼″ other end; "G" type Clutch blades. Net Each........87c

STUBBY DUAL BLADE DRIVERS

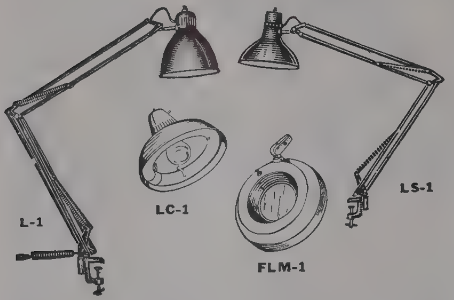
Blade No. SB-1—3/16″ regular, No. 1 Phillips. Net Each........ 69c
Blade No. SB-2—¼″ regular, No. 2 Phillips. Net Each.....69c
Handle No. 26—To fit above blades. Net Each..........54c
Nos. CS-1 or CS-2—Combination blade and handle. (SB-1 and No. 26 handle will be CS-1 combination.) Net Each. $1.23

PLASTIC ROLL KITS

No. CK-2—Combines RB-1, RB-2 blades and No. 25 handle in plastic roll. Net Each........ $2.70
No. CK-3—Contains RB-1, RB-2, RB-3 blades and No. 25 handle in plastic roll. Net Each........ $3.48
No. CK-20—RB-1 and RB-2 blades, No. 25 handle in zipper case. Net Each........ $2.79
No. CK-20C—CK-20 with chrome plated blades. Net....$2.94
No. CK-23—Same as CK-20 with RB3 blade added. Net. 3.51
No. CK-23C—CK-23 with chrome plated blades. Net.... 3.72
No. SK-20—SB-1, SB-2 blades, No. 26 handle in snap type case. Net Each........ $2.31
No. SK-20C—SK-20 with chrome plated blades. Net....$2.46

Work Lamps, Tools, Kits

LUXO ADJUSTABLE LAMPS AND ACCESSORIES



Provides glare-free, shadow-free light for office, home, shop, lab, work table. Precision spring-balanced action; light touch of finger-tip adjusts lamp to any position and it stays put. Can be raised, lowered, tilted or turned to any angle to put light where you want it or turned out of way when not in use. On-off switch conveniently located on top of lamp. Extension arms permit 360° sweep, 30″ to 45″ reach. Different brackets enable mounting or positioning anywhere. U/L Approved.

"COMBO" LAMP WITH COLOR CORRECTED LIGHT

"Combo" three-way lamp balances incandescent-fluorescent light in one fixture. Either type of light can be used individually or in combination. **Colors:** Specify dove gray, mist green, desert tan, frost brown.

Luxo Model LC-1—Specify A, B or C bracket. List, $29.50. Net Each **$21.75**

"CROWN LITE" WORKLAMP

Sturdily built "Crown Lite" economy work lamp. Easily adaptable to any job. Directs all the light where needed. **Color:** Gray.

Luxo Model C-1—Without bracket. List, $15.70. Net Each **$10.47**

Luxo Model C-1—With Bracket M. List, $16.20. Net Each **$10.80**

Luxo Model C-1—Specify bracket A, B or C. List, $17.95. Net Each **$11.97**

MAGNIFYING LAMP FOR PRECISION WORK

Combines large magnification, cool fluorescent light and maneuverability into one versatile unit. Designed for precision in inspection and assembly of subminiature components. Large precision-ground lens permits distortion-free magnification. Specify 3½, 4 and 6 diopter magnification. **Color:** Gray.

Luxo Model FLM-1—Specify A, B or C bracket. List, $39.50. Net Each **$29.62**

GENERAL PURPOSE INCANDESCENT LAMPS

Luxo Model L-1—Two extension arms, total length 45″. **Specify mounting type when ordering.**
With A, B or C bracket. List, $23.50. Net Each **$17.62**
With D or F bracket. List, $24.75. Net Each **18.56**
With E base. List, $28.00. Net Each **21.00**
With tilt-proof stand T (on casters). List, $49.50. Net.. **37.12**
With floor stand U (no casters). List, $39.00. Net Each. **29.25**

Luxo Model L-2—Two extension arms, total length 30″. With A, B or C bracket. List, $21.50. Net Each **$16.12**
With D or F bracket. List, $22.75. Net Each **17.06**
With E base. List, **$26.00.** Net Each **$19.50**

Luxo Model L-3—Three extension arms, total length 60″. With A, B or C bracket. List, **$26.50.** Net Each **$19.87**

Colors: Specify gray, green, brown, tan, black, white.

Inner Reflector—For above models. List, **$2.00.** Net Ea. **$1.50**

CHROME DELUXE INCANDESCENT LAMPS WITH INNER REFLECTOR

Specify mounting type when ordering.

Luxo Model L-1—Two extension arms, chrome finish. Total length, 45″.
With A, B or C bracket. List, **$31.50.** Net Each **$23.62**
With tilt-proof stand T (on casters). List, **$56.25.** Net.. **42.19**
With floor stand U (no casters). List, **$45.75.** Net Each. **34.31**

Luxo Model L-3—Three extension arms, chrome finish. Total length, 60″. With A, B or C bracket. List, **$35.50.** Net.. **$26.92**

FLAIR INCANDESCENT LAMPS

Luxo Model LS-1—Two extension arms, total length 45″.
With A, B or C bracket. List, **$24.50.** Net Each **$18.37**
With D or F bracket. List, **$25.75.** Net Each **19.31**
With E base. List, **$29.00.** Net Each **21.75**

Luxo Model LS-2—Two extension arms, total length 30″. With A, B or C bracket. List, **$22.50.** Net Each **$16.87**
With D or F bracket. List **$23.75.** Net Each **17.81**
With E base. List **$27.00.** Net Each **20.25**

Inner Reflector for above models—List, **$2.00.** Net Each **1.50**

Colors: Specify dove gray, desert tan, metallic green, ebony black, chalk white, mist green, terra cotta.

FLUORESCENT LAMPS

Luxo Model FL-1—Two extension arms, total length 45″. With A, B or C bracket. List, **$29.50.** Net Each **$22.12**
With D or F bracket. List, **$30.75.** Net Each **23.06**

Luxo Model FL-4—Two extension arms, total length 37″. With A, B or C bracket. List, **$29.50.** Net Each **$22.12**
With D or F bracket. List, **$30.75.** Net Each **23.06**
With tilt-proof stand T (on casters). List, **$55.50.** Net.. **41.62**
With floor stand U (no casters). List, **$45.00.** Net Each. **33.75**

Colors: Specify gray, green, brown, black, tan.

LAMP BASES, BRACKETS, STANDS, ACCESSORIES

Bracket A—Clamps lamp to edge of table, desk, level surface. List, **$2.25.** Net Each **$1.69**

Bracket B—Screws to wall or partition to hold lamp vertically. List, $2.25. Net Each **$1.69**

Bracket C—Screws to bench, table and other horizontal surfaces. List, $2.25. Net Each **$1.69**

Bracket A, B or C—Models as described above; but with chrome finish. List, $3.50. Net Each **$2.63**

Bracket M—Combination bracket supports lamp fixture to horizontal or vertical surface. List, **50c.** Net Each **33c**

Bracket D—Screws to drafting table or other slanting surface. Has adjusting knob. List, $3.50. Net Each **$2.63**

Bracket F—Clamps to drafting table or slanting surface. List, $3.50. Net Each **$2.63**

Bracket FE—Portable, heavyweight base for desk or other horizontal surfaces. List, **$12.25.** Net Each **$7.95**

Floor Stand T—Tilt-proof; heavy construction; adjustable height bracket; silent, ball-bearing casters. List, **$28.25.** Net... **$21.19**

Floor Stand U—Floor stand without casters. List, **$17.75.** Net Each **$13.31**

Inner Reflector—Doubles light output of the incandescent bulb. List, **$2.00.** Net Each **$1.50**

Chrome Spring Covers—(Per set of four). List, **$3.50.** Net Each **$2.63**

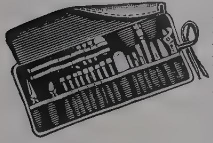
Three-Wire Plug (Std.) and Cord—List, **$3.00.** Net Ea.. **$2.25**

T8 Fluorescent Tubes FL Lamp—(Two tubes required). Net Each **$1.00**

Brace—Keeps lower arm of lamp from striking wall. List, **30c.** Net Each **18c**

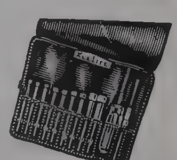
XCELITE SERVICE TOOLS

SERVICE MASTER KIT



Soft roll kit. Nickel chrome tool finish. Contains: No. 52C, long nose pliers; 55C, diagonal pliers; 46, adjustable wrench; 99-6 thru -12, -14, -16 (regular) and 99-S8, -S10, -S12 (stubby) nut drivers; 99-811, -812 (slotted) and -821 (#1 Phillips) screwdrivers; 99-38, -39 reamers; 99X10 extension; 99-1 (regular) and -3 (stubby) handles. Weight, 2¾ lbs.

Xcelite No. 99 SM Service Master Kit—Net.. **$22.35**

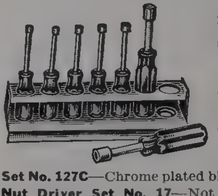


Combination Set No. 99PR—Detachable blade set in handy carrying kit. Contains: 99-6, -7, -8, -9, -10, -11, -12, -14, -16 nut drivers: 99-81, -82 screw driver blades; 99-1 handle.
Set No. 99PR—Net Each **$8.67**

Combination Set No. 99JR—Not illustrated. Contains: 99-6, -7, -8, -9, -10, -11, -12 nut drivers; 99-811, -812, -821, -822 screw driver blades; 99-2 handle; handy plastic carrying case.
Set No. 99JR—Net Each **$7.50**

Series "99" Handles or Interchangeable Tools may be purchased separately.

NUT DRIVER SETS



Nut Driver Set No. 137—Most frequently used sizes in handy bench stand. Contains nut drivers; 6, 8, 10, 11, 12, HS-16, and HS-18 with color coded handles. Net Each **$6.42**

Set No. 137C—As above, with chrome plated blades. Net Each **$7.02**

Nut Driver Set No. 127—Seven drivers (Nos. 6, 7, 8, 9, 10, 11, and 12) with lockable wall rack. Not Illustrated. Net Each **$5.76**

Set No. 127C—Chrome plated blades. Net Each **$6.21**

Nut Driver Set No. 17—Not illustrated. Seven favorite nut drivers (Nos. 6, 7, 8, 9, 10, 11, and 12), with handy bench stand. Net Each **$5.43**

Set No. 17C—Chrome plated blades. Net Each **$5.94**

Nut Driver Set No. 147—Contains HS8, -9, -10, -11, -12, -14, and -16 Hollow Shaft Nutdrivers with bench stand. Nickel-plated blades, color coded handles. Net Each **$7.17**

Set No. 147C—Chrome plated blades **$7.77**

WE CAN PROVIDE ALL TOOL REQUIREMENTS FROM OUR COMPLETE AND UP-TO-DATE STOCK.

ervicemen's Supplies, Code Course

KESTER SOLDER AND PASTE

ic Resin Core Sold-
0% Tin, 60% Lead.
Spool, 1/16″ $1.14
Net Each...
Spool, 1/16″ $5.50
Net Each...
Spool, 3/16″ $1.11
Net Each...
Spool, 3/16″ $5.35
Net Each...
adio Solder. Small
age of "Resin-Five"
dia.). Carton of 10
3.
on, Net..... $1.67
Core Solder. For
ral, non-electrical
ring. 1/8″ Dia. $1.11
Spool, Net..
Spool, Net..$5.35

"RESIN FIVE" CORE

mposition		Net Prices			
		3/16″ Diameter		1/16″ Diameter	
n	Lead	1 lb.	5 lbs.	1 lb.	5 lbs.
%	60%	$1.11	$5.35	$1.14	$5.50
%	50%	1.31	6.35	1.34	6.50
%	40%	1.48	7.20	1.51	7.35

SOLDERING PASTE

nproved soldering paste designed to meet new manufacturing
ods. More uniform; every portion alike in fluxing strength.
s eliminate soldering failures. **2 Oz. Can**—Net.........11c
ay Carton—Ten 2 oz. cans. Net per carton.........$1.05
Can—Net Each....**80c** **5 Lb. Pail**—Net....... 3.50
. Pail—Net Each..............................$20.00

KRYLON SPRAY-ON ENAMELS AND CHEMICALS

No. 1302 Crystal-Clear Spray—Prevents pitting and rusting of antennae; reduces corona and arcing; salt-spray resistant. Dielectric strength, 400 to 800; dielectric constant, 3.2 to 3.7 (1,000 cps); electrical resistance, 10^{10} ohms/cm³. 16 oz. spray can. Net Each................ $1.30

No. 1321 Rust Veto Spray—Creates dry, waxy film (.0003″-.0005″ thick). Protects metals from corrosion and seals out moisture. Remove film with commercial solven. Covers approximately 90-100 sq. ft. 16 oz. spray can. Net Each................ $1.30

SPRAY ENAMELS

herproof and waterproof. Excellent adhesion. Guaranteed
logging valve. Available in the following colors:

ylon No.	Color	Krylon No.	Color
01	Bright Silver	1802*	Pastel Yellow
501	Glossy White	1901	Regal Blue
502	Flat White	1902	Baby Blue
503*	Antique Ivory	2001	Hunter Green
501	Glossy Black	2002*	Surf Green
502	Flat Black	2101	Cherry Red
503	Machine Gray	2102	Baby Pink
504	Light Gray	2201	Bright Copper
505	Dove Gray	2301*	O.D. Khaki
701	Bright Gold	2401*	Int'l Orange
301	Chrome Yellow	2501*	Leather Brown

ilable only in 16 oz. spray can.
. Spray Can—Net Each..........................$1.19
Spray Can—Add A to number. Net Each......... .65

"HIDE-A-MARK®" SPRAY COAT

rs old stencils, crayon markings, etc. Makes drums, crates,
ns reusable. Dries rapidly, allows new stencilling almost
diately. Ready to use, no brush, no muss, no fuss.
on No. 3007 "Hide-a-Mark"® Spray Coat—Net.. $1.13

"GLO-BRITE" FLUORESCENT SPRAY PAINT

use on paper, wood, cloth, glass, metal, styrofoam and some
ics. Dries in minutes. Just push the button and spray. No fuss
ss. Glows in daylight. 16 oz. cans.

lon o.	Color	Krylon No.	Color
01	Red-Orange-633*	3104	Lemon Yellow
02	Yellow Orange-634*	3105	Cerise
03	Sunset Gold	3106	Green

le to MIL-P-21600 (AER) specifications.
-Brite" Fluorescent Spray Paints—16 oz. can.
Each.................................. $1.86

ZINC CHROMATE METAL PRIMERS

ys ready spray dispensers of rust inhibiting zinc chromate
er Indispensable wherever metal priming is necessary. Dries
In 16 oz. spray cans.
on No. 1319 (Yellow) or **No. 1320 (Green)**—Net Each. $1.30

"SCOTCH" ELECTRICAL TAPE

NO. 33 ELECTRICAL TAPE WITH PLASTIC BACKING

SCOTCH
No 33
Electrical
Tape
PLASTIC
BACKING
UL

Tough, stretchy, thin caliper electrical friction tape with high dielectric rating and strong plastic backing The 20′ roll is an average one-day supply for the serviceman, taking up a minimum amount of cabinet space, yet handy to use. Also available in strong, neat tubes of 12.

Size	Net Price Per Roll	
	Per Single Roll	Carton of 12
3/8″ x 20′	$0.35	$0.32
1/2″ x 150″	....	.39
3/4″ x 20′	.55	.50
3/4″ x 66′	1.50	1.35
3/4″ x 240″	....	.75

NO. 27 ELECTRICAL TAPE
WITH GLASS CLOTH BACKING AND THERMOSETTING ADHESIVE

Scotch No. 27 Electrical Tape—1/2″ x 66 ft. Net Each.................. $1.75
Carton of 12 rolls. Net Per Roll....................$1.58

NO. 22 ELECTRICAL TAPE WITH PLASTIC BACKING

.010″, high dielectric. 36 yards long.

Width	Rolls Per Carton	Net Each Roll	
		Per Roll	Per Carton
3/8″	12	$1.72	$1.55
1/2″	12	1.95	1.76
3/4″	12	2.40	2.16
1″	12	3.00	2.70
1 1/2″	6	4.50	4.05
2″	6	6.00	5.40

ERSIN MULTICORE SOLDER

NEW SAVBIT® MULTICORE

SERVICE PAK
Multicore

Special alloy stops all wear on soldering tips due to absorption of copper by tin as occurs with ordinary solder. Contains copper, tin and lead. Conductivity, tensile and shear strength are excellent. Thin wall 5-core construction, assures flux continuity. Only virgin tin and lead and non-corrosive flux are used. Non-corrosive under high humidity. Tins rapidly.

Gauge	Net, 1 lb.	Net, 7 lbs.
14	$1.75	$11.97
16	1.77	12.11
18	1.81	12.39
20	1.97	13.51
22	2.09	14.35

ERSIN STANDARD MULTICORE

1 POUND CARTONS

Gauge	40/60	45/55	50/50	60/40
14	$1.41	$1.52	$1.61	$1.79
16	1.43	1.54	1.63	1.81
18	1.47	1.59	1.67	1.86
20	....	....	....	2.01
21	....	....	....	2.07
22	....	....	....	2.14

7 POUND REELS

Gauge	40/60	45/55	50/50	60/40
14	$ 9.59	$10.36	$10.99	$12.25
16	9.73	10.50	11.13	12.39
18	10.01	10.85	11.41	12.74
20	....	....	....	13.79
21	....	....	....	14.21
22	....	....	....	14.70

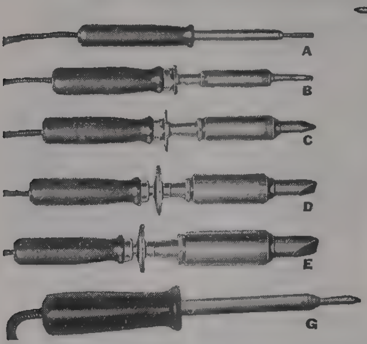
RIDER "SOUND-N-SIGHT" CODE COURSE

"Sound-n-Sight" method makes learning of Morse, blinker code and typing easier and faster without conscious effort to memorize. Same method as used by Armed Forces and many industries. Sound training given by clearly transmitted signal patterns on records with the instructor's voice immediately informing you if you are correct; Sight training by 47 identification cards with individual signal patterns and the letter, number or punctuation mark for which they stand. A clearly written book shows how to use course; increase speed, practice with someone else, and transmit; day by day charts check your progress.

No. 1 Novice Course—Three 10″ LP records, 47 identification cards and book trains you to receive up to 8 W. P. M. and transmit.
No. REC-08 Novice Course......................Only **$9.50**
No. 2 Advanced Course—For general amateur, extra or commercial license. Three 10″ LP records and book covers 9 W.P.M. to 20 W.P.M.
No. REC-920 Advanced Course.................Only **$8.95**
No. 3 Complete Course—Consists of six 10″ LP records, 47 identification cards and book; trains you to receive up to 20 W. P. M.
No. REC-020 Complete Course................Only **$15.95**

Soldering Irons, Wire Strippers

AMERICAN BEAUTY SOLDERING IRONS



STANDARD SOLDERING IRONS

Tips available for ¼″ to 1⅛″ dia.; plug-type of pure copper heavily nickeled; easily removable. Heating elements are unit construction, compression wound, corrosion resistant. Available in wattages from 30 to 550. Operate on either AC or DC current, in standard voltages and 32 volts. All irons come with 6 ft. HPD cord and plug-cap; available with 3-conductor cord (HPD, SJ, or HSJ), at slight additional charge. Heat-insulating stand supplied.

Am. Beauty No.	Fig.	Diam. Tip	Watts	Lgth. Over All	Cas-ing Diam.	Approx. Ship. Weight	†Net Each
3128	A	¼″	60	12¼″	9/16″	1 lb.	$ 4.25
3128-A	F	¼″	60	....	9/16″	1 lb.	4.90
3138#	B	⅜″	100	12⅞″	⅞″	2 lbs.	6.50
3138-A*	F‡	⅜″	100	....	⅞″	2 lbs.	7.15
3158	C	⅝″	200	13⅝″	1¼″	3 lbs.	7.80
3178	D	⅞″	300	14⅜″	1 9/16″	4 lbs.	10.40
3198	E	1⅛″	550	15″	1¾″	5¾ lbs.	13.00

†Prices shown apply to 110-120, 208 and 220-240 volts only; for other voltages add **65c** to net price shown. #Also made in 130- and 150-watt inputs. *Also made in 150-watt input. ‡Fig. B iron with angle-type casing, Fig. F.

BANTAM SOLDERING IRONS

Flared handle; fiber disc shield available. Strong stainless steel casing; nickel-chromium element is mica insulated. Plug-type copper tip for easy replacement. Comes with 6 ft. HPD cord and plug-cap; available with SV cord or 3-conductor cord at additional charge. Heat insulating stand supplied. Diamond points standard; chisel-type provided if specified. Also available in 40-watt input. For 110 v. AC or DC operation only.

American Beauty No.	Figure	Dia. Tip	Watts Input	Length Overall	Approx. Shpg. Wt.	Net Each
3118	G	⅛″	30	9¼″	12 oz.	$3.90
3118A*	F	⅛″	30	....	12 oz.	4.40
3118SC	G	⅛″	30	8″	12 oz.	3.90
3118SCP	G†	⅛″	30	8″	12 oz.	3.90
3120	G	5/16″	30	9¼″	12 oz.	3.90
3120A*	F	5/16″	30	....	12 oz.	4.40
3120SC	G	5/16″	30	8¼″	12 oz.	3.90
3120SCP	G†	5/16″	30	8¼″	12 oz.	3.90

†Handle tapered similar to that shown in Fig. K. *Angle-type.

REPLACEMENT TIPS AND ELEMENTS

For Iron No.	Pure Copper Tip*			Element	
	No.	Diam.	Net	No.	Net
3118 & A	3718#	⅛″	$0.16	9281	$2.10
3120 & A	3720‡	5/16″	.20	9280	2.10
3120 & A	3720-IP‡	5/16″	.40		
3125	....	....	....	9271	2.20
3125-A	....	....	....	9271-A	2.20
3128 & A	3728 & S	¼″	.30	9272†	2.30
3128 & A	3728-IP & S-IP	¼″	.57	9272A†	2.95
3138	3738	⅜″	.42	9273	2.70
3138	3738-S	⅜″	.43		
3138	3738-IP	⅜″	.69		
3138	3738-S-IP	⅜″	.70		
3158	3758	⅝″	.98	9275	3.60
3158	3758-IP	⅝″	1.35		
3178	3778	⅞″	1.95	9277	4.95
3178	3778-IP	⅞″	2.36		
3198	3798	1⅛″	3.30	9279	6.80
3198	3798-IP	1⅛″	3.82		

*All tips with exception of **3728-S** and **3738-S** can be furnished with either chisel or diamond point—**Please Specify.** 3728S and 3738S are chisel point only. †9272 is for Iron No. 3128; 9272A is for Iron No. 3128A; both include handle spring, tube, and terminal assembly. #Also fits Nos. 3118-SC and 3118-SCP. ‡Also fits Nos. 3120-SC and 3120-SCP.

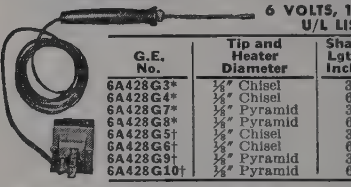
Letter suffix **IP** indicates tips have special long life Iron-Plating. All others are nickel plated.

PENCIL-TYPE SOLDERING IRON (FIG. K)

Designed for the electronics industry. Perfectly balanced, weighing only 4 oz., the P-100 has high heat output and ultra-fas recovery. Unique tip-element holding method permits quick, eas interchanges—hot or cold. Uses 30 watts AC or DC. Diamond ti is standard; specify chisel-tip if preferred. Complete with 6′ SP- heater cord and plug cap. When ordering, specify tip size: ⅛″ 3/16″ or ⅜″. Overall lgth. 7¼″; with ⅜″ tip 6⅜″. Wt., 8 oz. **$3.40**
No. P-100 (Specify tip size.)—Net Each................

G.E. SOLDERING IRONS

MINIATURE INDUSTRIAL IRONS



6 VOLTS, 12 WATTS
U/L LISTED

G.E. No.	Tip and Heater Diameter	Shank Lgth., Inches	Net Each
6A428G3*	⅛″ Chisel	3	$12.00
6A428G4*	⅛″ Chisel	6	12.00
6A428G7*	⅛″ Pyramid	3	12.00
6A428G8*	⅛″ Pyramid	6	12.00
6A428G5†	⅛″ Chisel	3	7.20
6A428G6†	⅛″ Chisel	6	7.20
6A428G9†	⅛″ Pyramid	3	7.20
6A428G10†	⅛″ Pyramid	6	7.20

*Complete iron including tip and heater assembly, 6′ cord, trans former. †Without transformer.

LIGHTWEIGHT INDUSTRIAL IRONS

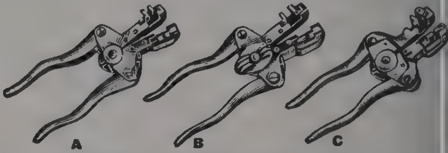
Complete with 6′ Type SJ cord, iron-clad tip, heater assembly Tips must be brazed on. Available with 3-conductor cord an plug. Weighs 8½ oz. Operates on 60 w., 120 v. U/L listed.

G.E. No.	Rating		Tip		Net Each
	Volts	Watts	Dia.	Type	
6A273	120	60	¼″	Chisel	$11.36
6A283	120	60	5/16″	Pyramid	11.36
6A283G23	120	60	5/16″	Chisel	11.36

Tip		Renewal Tip & Heater*		Iron-clad Tip Only†	
Dia.	Type	G.E. No.	Net Ea.	G.E. No.	Net Ea
¼″	Chisel	6A300	$5.56	326A964P21	$1.44
5/16″	Pyramid	6A301	5.56	326A964P22	1.44
5/16″	Chisel	6A301G4	5.56	116V707P21	1.44

Standard Package Quantity: *6; †12.

G-C SPEEDEX WIRE STRIPPERS, KITS



SPEEDEX STANDARD MODEL (FIG. A)

Works on 90% of all stripping jobs. Strips wires No. 8 to No. 3 Blades are interchangeable; hardened and ground to razor shar edges. Handles smooth and narrow for ease of handling.

SPEEDEX AUTOMATIC MODEL (FIG. B)

Equipped with "Trig-O-Matic" Stay-Open feature, these stripper are especially suited for stripping fine and stranded wires. Stay-Open feature keeps wires from being crushed.

SPEEDEX SPEED-O-MATIC MODEL (FIG. C)

Latest model featuring "Fully Automatic Delayed Return Action" to prevent crushing wires. Combines all above features.

With Blades for Wire Sizes	Standard		Trig-O-Matic		Speed-O-Matic	
	Model	Net	Model	Net	Model	Net
12 to 20	733	$4.77	744	$5.94	766	$5.94
14 to 30	733-A	4.77	744-A	5.94	766-A	5.94
10 to 18	733-B	4.77	744-B	5.94	766-B	5.94
8 to 10	733-C	4.77	744-C	5.94	766-C	5.94
16, 18, 20, 22	733-D	4.77	744-D	5.94	766-D	5.94
14, 16, 18	733-E	4.77	744-E	5.94	766-E	5.94
10, 12, 14	733-F	4.77	744-F	5.94	766-F	5.94
No. 18 POSJ or parallel wire	733-G	4.77	744-G	5.94	766-G	5.94
300-ohm TV and FM Twin line	733-H	4.77	744-H	5.94	766-H	5.94
10, 12, 14, 16, 18, 20, 22	733-I	4.77	744-I	5.94	766-I	5.94
10 to 20	....	....	....	....	766-M	5.94
Straight Cutter	....	....	....	....	766-N	5.94

Model 733-K Kit—Contains Standard Stripper and 7 interchangeable blades in hinged cover metal box. Net Ea. **$9.57**

Model 744-K Kit—With Automatic Stripper. Net Ea. . **$11.97**

Model 766-K Kit—With Speed-O-Matic Stripper. Net. **11.97**

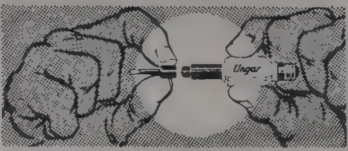
Ungar® Soldering Tools

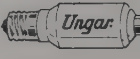
NEW THREAD-ON HEATING UNITS AND MINI-TIPS*

FOR HIGH SPEED REPEAT SOLDERING

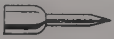
lusive new development prov.des 100% increase in recovery : four times greater heat transfer. Stops tip seizure from ation or solder. Positive seal between heating unit and i-Tip. New passivated plating prevents barrel oxidation and ace flaking. Tips are UC47 copper; iron clad nickel plated or lated; available in chisel or pencil tip. *Trade Mark; pat. pend.

gar o.	Description	Net Each, Lots of 1	10
7	850°-900° F, 47½-watt heating unit	$2.40	$1.95
7	750°-800° F, 37½-watt heating unit	1.20	.98
111	Nickel-plated pencil Mini-Tip ¾" l.	.60	.49
113	Nickel-plated chisel Mini-Tip ¾" l.	.60	.49
	Unplated pencil Mini-Tip	.20	.17
	Unplated chisel Mini-Tip	.20	.17

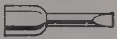




4037, 1237

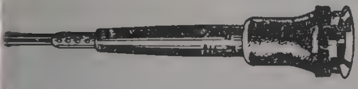


PL111, 111



PL113, 113

NEW IMPROVED MODEL 776 HANDLE

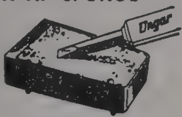


- COOL
- SAFE
- LIGHT WEIGHT
- COMFORTABLE

iality proven in millions of hours of production line use. Now even better with nine eat improvements: Full contact spring socket; stainless steel heat deflector; new tagonal guard washer; soft touch grip; plated socket terminals; new ceramic and ass insulator; thermo-stabilized phenolic; polyvinyl insulated cord; and conforming rd protector. Tips cannot wobble.

ngar Model 776 Handle—Net Each **$1.20.** Lots of 10, Net Each......... **98c**

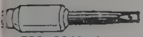
NEW KLEEN-TIP SPONGE



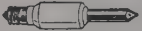
DOUBLES THE LIFE OF TIPS Specially processed sponge provides the surest way to clean soldering tips. Removes oxidation, prevents contamination and insures soldering reliability. Tray is of durable phenolic with bracket for fastening to bench.

Ungar No. 400—Net Each....... **$1.00**
Lots of 10, Net Each **81c**
Ungar No. 455 Refill Sponges—Two in bag. Net Each Pkg............. **40c**
Lots of 10 Packages, Net Each...... **33c**

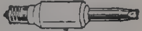
INTERCHANGEABLE TIPS, ELEMENTS AND TIPLETS®



533, 1233, 4033

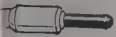


536, 1236, 4036

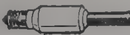


539, 1239, 4039

ting Units Temperature Range: 850°-1000° F for **Super Heat** Series #4000 rated 47½ watts; 750°-800° F for **Hi-Heat** s #1200 rated 37½ watts; and 650°-750° F for **Standard** Series #500, rated 23½ watts. Thread-in heating units (used with tiplets), have silver plated steel body.



5, 1235, 4035
ake All #300
ries Tiplets)



4045
(Takes All #800
Series Tiplets,
Including
De-soldering Types)

INTEGRATED HEATING UNITS WITH TIPS

Ungar No.	Description	Net Each, Lots of 1	10
533	Standard unplated copper long taper chisel tip and heating unit	$1.00	$0.81
536	Standard unplated copper pyramid tip with heating unit	1.00	.81
539	Standard unplated copper short taper chisel tip and heating unit	1.00	.81
1233	Hi-Heat unplated copper long taper chisel tip and heating unit	1.20	.98
1236	Hi-Heat silver plated solid iron pyramid tip and heating unit	1.20	.98
1239	Hi-Heat silver plated solid iron chisel tip and heating unit	1.20	.98
4033	Super Hi-Heat, iron clad, silver plated, long chisel tip and unit	2.40	1.95
4036	Super Hi-Heat, iron clad, silver plated, pyramid tip and heat unit	2.40	1.95
4039	Super Hi-Heat, iron clad, silver plated, taper chisel tip and heat unit	2.40	1.95

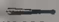
HEATING UNITS AND TIPLETS

Ungar No.	Description	Net Each, Lots of 1	10
535	Standard ⅛" tap unit for Series 300 tiplets	$1.00	$0.81
1235	Hi-Heat, ⅛" tap unit for Series 300 tiplets	1.20	.98
4035	Super Hi-Heat, ⅛" tap unit for Series 300 tiplets	2.40	1.95
PL331	Iron clad nickel plated copper 1" pencil tiplet	.48	.39
331	Unplated version of PL331	.16	.13
PL332	Iron clad, nickel plated copper 1" offset pencil tiplet	.48	.39
332	Unplated version of PL332	.16	.13
PL333	Iron clad, nickel plated copper 1" long chisel tiplet	.48	.39
333	Unplated version of PL333	.16	.13
PL338	Iron clad nickel plated copper 1" tapered needle tiplet	.48	.39
PL340	Iron clad nickel plated copper ¾" micro-needle tiplet	.48	.39
4045	Super Hi-Heat 3/16" tap unit for Series 800 tiplets	2.40	1.95
PL823	Iron clad, nickel plated copper 1" pyramid tiplet	.48	.39
823	Unplated version of PL823	.16	.13
PL824	Iron clad, nickel plated copper 1" chisel tiplet	.48	.39
824	Unplated version of PL824	.16	.13
PL833	Iron clad, nickel plated copper 1¾" chisel tiplet	.80	.65
PL834	Iron clad, nickel plated copper 1¾" offset chisel tiplet	.80	.65

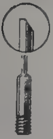
PL331

2 PL332

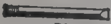
3 PL333



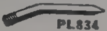
L338



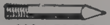
FL340



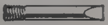
PL833



PL834

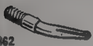


823 + PL823



824 + PL824

DE-SOLDERING TIPLETS® AND KIT



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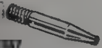

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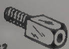

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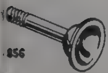


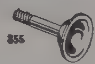
856

Help remove components 70% faster; melt solder on all terminals simultaneously. For use with No. 4045 heating unit.

Any Model Tiplet—Net Each...... **60c**
Lots of 10, Net Ea.. **49c**

No.	Tiplet Type
862	Slotted offset
857	Straight slotted
863	Cube
856	⅝" dia. cup
855	¾" dia. cup
854	1" dia cup
861	Triangle
858	Bar (inline)

Ungar No. 270 De-Soldering Kit—With 5 most popular tiplets, No. 776 handle and No. 4045 heating unit in metal case. Net **$5.35**
Lots of 6-11, Net **$4.76**



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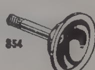

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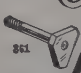

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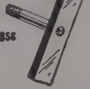

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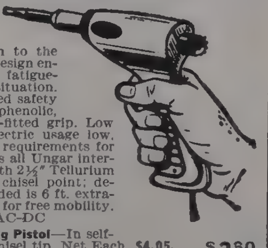
MODEL 260 SOLDERING PISTOL



- LIGHT WEIGHT
- LONG REACH

A much-wanted addition to the Ungar line. Lightweight design engineered for comfort and fatigue-free soldering in any situation. Extra-long reach for added safety and convenience. Tough, phenolic, riveted handle has hand-fitted grip. Low wattage design keeps electric usage low, yet delivers perfect heat requirements for every job. Handle accepts all Ungar interchangeable tips; comes with 2½" Tellurium copper tip with tapered chisel point; delivers 800° F. Cord provided is 6 ft. extra-flexible, extra-lightweight for free mobility. For operation on 115 v. AC-DC

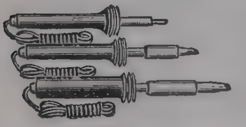
Ungar Model 260 Soldering Pistol—In self-display. Complete with chisel tip. Net Each, **$4.05.**
Lots of 6 to 11, Net Each.......................... **$3.80**
Ungar Model 660 Pistol Handle—Handle only. Net Ea. **$2.40**
Lots of 10, Net Each.......... **1.95**

550-598

Servicemen's Tools, Cabinets

WELLER SOLDERING IRONS, GUNS

MAGNASTAT SOLDERING IRONS



Built-in temperature control with sensing device at the tip assures reliable soldering every time. Will not overheat. Reaches full heat quickly. Lightweight, balanced design for easy, fatigue-free handling. Sturdy construction for long life even under assembly-line conditions. High-impact, plastic handle stays cool; provides plug-in of flexible cord. Heat-sensing device in tip protected by stainless steel sheath. Tips are premium plated and tapered for efficiency; easy screw-on replacement. All units for 110-120 v. AC operation. Complete with three-wire cord.

Weller Model TC-40—For 40-watt, printed-circuit type soldering. Weight, 2.9 oz. Net Each.................... $6.75

Weller Model TC-60—For 60-watt, light to medium soldering. Weight, 4.1 oz. Net Each........................ $7.50

Weller Model TC-120—For 120-watt, medium to heavy-duty soldering. Weight, 8.6 oz. Net Each.................. $8.63

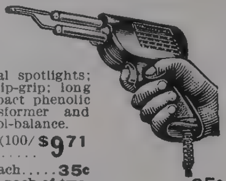
MAGNASTAT REPLACEMENT TIPS

Tip	For	Net	Tip	For	Net	Tip	For	Net
WT-40	TC-40	38c	WT-60	TC-60	53c	WT-120	TC-120	90c

SOLDERING IRON CORD SET

Weller Model CS-30—Three-wire cord with plug; fits all irons. Net Each.................... $1.50

LIGHT DUTY MODEL D-440



FEATURES: Instant heat; dual spotlights; dual heat (switch-controlled); tip-grip; long reach; replaceable tips; high-impact phenolic plastic housing; built-in transformer and streamline design for perfect pistol-balance.

Weller Model D-440—Dual heat (100/150 watts). Net Each.......... $9.71

No. 6120—Smoothing tip. Net Each.....35c

No. 7135—Soldering tip. Net per pack of two..............25c

No. 6110—Cutting tip (with nuts). Net Each..............35c

HEAVY DUTY MODEL D-550

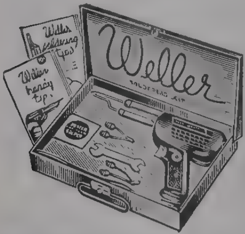
Similar in appearance and features to Light Duty model above.

Weller Model D-550—Dual heat (200/275 watts). Net Each.................................... $11.95

No. 7250—Soldering tip. Net per pack of two..............35c

No. 6140—Smoothing tip (with nuts). Net Each............35c

No. 6130—Cutting tip (with nuts). Net Each..............35c



MODEL 8250A 250-WATT GUN

FEATURES: Instant heat; dual spotlights; trigger switch; replaceable tips; rugged plastic streamlined housing; long-reach for inaccessible spots; pistol grip handle. U/L listed.

Weller Model 8250A—Single heat. Net Each $9.71

No. 7250—Soldering tip. Net per pack of 2......35c

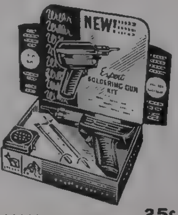
No. 6140—Smoothing tip (with nuts). Net Each...35c

No. 6130—Cutting tip (with nuts). Net Each........35c

Weller Model 8250AK Kit—Everything you need for hundreds of homecraft and hobby jobs. Complete kit contains the following materials: One Model 8250A Soldering Gun; one box of Kester Solder; one each of all three tips; one tip interchange wrench; one sturdy metal carrying case, with handle; two instruction booklets to help make soldering easier to understand.

Weller Model 8250AK Kit—Net Kit.................. $11.21

MODEL 8200K 90/125-WATT GUN KIT



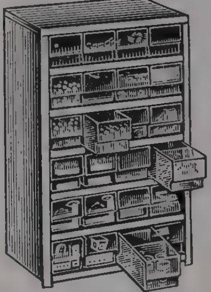
Dual heat feature saves time, adds convenience and increases tip life. Instant switching to high or low heat by the "Triggermatic" control. Pre-focused spotlight illuminates the work. Tip heats instantly, high heat is used only when necessary. Tip utilizes copper for heat transfer and ironplating for durability and long life. Compact design for precision soldering. Kit includes soldering gun, all-purpose solder, wire brush, and a soldering aid for opening old joints and twisting wires.

Weller Model 8200K Kit—Dual heat 90/125 gun kit. Net Each.................... $5.95

No. 8125 Tips—Package of two tips. Net Each..25c

AKRO-MILS PARTS CABINETS

RS SERIES CABINETS



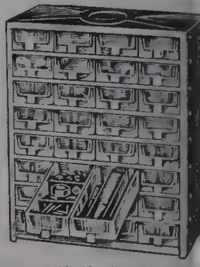
All-steel frame; baked-on hamme tone silver gray finish. Lifetim guaranteed transparent plast drawers have safety catch to pr vent spilling. Molded in full lengt drawer runners. Removable d viders allow four different com partment sizes. Cabinets can stan on any flat surface, be stacked, hung from wall. Labels supplie for quick and easy indexing. D viders and rubber feet include Drawers size for all models: 2⅞ w. x 2¾″ d. x 10¾″ long.

A-M Model	Drawers	Size*, H., In.	Wt., Lbs.	Net Each
RS-32	32	28½	31	$37.0
RS-24	24	21½	23	27.0
RS-16	16	14½	16	18.5
RS-12	12	11	12½	13.9
RS-8	8	7½	9½	9.2

*All cabinets 13⁵⁄₁₆″ w. x 11⅛″

J SERIES CABINETS

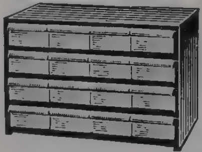
All-steel cabinet; crystal-clear plastic drawers; individual drawer guides. Complete with index cards, removable lengthwise and crosswise dividers, rubber feet. Drawer size, 2¾″ w. x 1⁷⁄₁₆″ d. x 5⅞″ long. Dividers separate drawers into three compartments. Safety catch prevents drawers from spilling.



A-M Model	Drawers	Size,* H., In.	Wt., Lbs.	Net Each
J-128	128	30½	50	$52.98
J-96	96	22½	38	41.98
J-64	64	15¼	24	23.98
J-48	48	22½	18	18.98
J-32	32	15¼	12	11.98
J-24	24	12⅛	10	9.48
J-20	20	10⅛	8	7.48
J-16	16	8⅛	7	6.48
J-12	12	6⅛	6	4.98
J-8	8	4	4	3.98

*All cabinets 6″ deep. Width: J-8 through J-48, 12½″; J-64 throug J-128, 25⅛″.

Akro-Mils Model J-1 Extra Drawers—Net Each...........25



NEW M SERIES CABINET

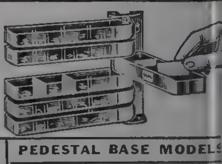
Best yet for electronic parts st age. Clear plastic drawers co with adjustable dividers for lengt wise and/or crosswise compar mentalization; divide drawers in 12 or less equal or odd sized s tions. Dividers and index lab for front of drawers provid Drawers, 2″ h. x 11″ l. x 3″ w M3 Series; 4″ w., M4 Series, insi dimensions.

M-3 SERIES CABINETS

A-M Model	No. of Drawers	Dimensions, In. W. x D. x H.	Wt., Lbs.	Net Each
M3C-10	10	17¼ x 11¹⁄₁₆ x 6⁵⁄₁₆	11	$11.50
M3C-15	15	17¼ x 11¹⁄₁₆ x 9	14	17.00
M3C-20	20	17¼ x 11¹⁄₁₆ x 11¾	18	22.50
M3C-30	30	17¼ x 11¹⁄₁₆ x 17³⁄₁₆	24¾	33.50
M3C-40	40	17¼ x 11¹⁄₁₆ x 22⅝	31¾	44.50
M3C-50	50	17¼ x 11¹⁄₁₆ x 28	38½	56.50
M-3 SERIES FOR 36″ SHELVING				
M3F-40	40	34½ x 11¹⁄₁₆ x 11¾	34	$44.98
M3F-60	60	34½ x 11¹⁄₁₆ x 17³⁄₁₆	46	66.98
M-4 SERIES CABINETS				
M4B-8	8	17⅞ x 11¹⁄₁₆ x 6⁵⁄₁₆	10¾	$10.98
M4B-12	12	17⅞ x 11¹⁄₁₆ x 9	14	15.98
M4B-16	16	17⅞ x 11¹⁄₁₆ x 11¾	17¼	20.98
M4B-24	24	17⅞ x 11¹⁄₁₆ x 17³⁄₁₆	24½	31.98
M4B-32	32	17⅞ x 11¹⁄₁₆ x 22⅝	32	41.98
M4B-40	40	17⅞ x 11¹⁄₁₆ x 28	39	52.98
M-4 SERIES FOR 36″ SHELVING				
M4E-32	32	35 x 11¹⁄₁₆ x 11¾	36	$41.98
M4E-48	48	35 x 11¹⁄₁₆ x 17³⁄₁₆	55	64.98

"SWING-BIN®" CABINETS

Efficiently stores dozens of small items. Bins swing out for access. Clear plastic drawers are 2½″ x 9½″ x 1¹⁄₁₆″ deep. Pedestal base (SP) or Bolt-Down (SC) types. Removable bin dividers. Bins easily removed for cleaning.



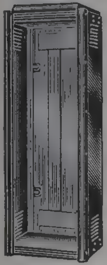
Akro-Mils Number	Drawers No.	Drawers Height	Net Each
SC-6	6	8¼″	$ 2.98
SC-12	12	16″	4.98
SC-18	18	23⅝″	7.98
SC-24	24	31″	9.98
SC-36	36	23⅝″	15.98
SC-48	48	31″	19.98

PEDESTAL BASE MODEL

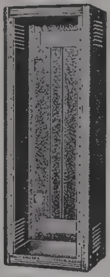
Akro-Mils Number	Drawers No.	Drawers Height	Net Each
SP-4	4	6″	$2.9
SP-6	6	[illegible]¾″	3.9
SP-9	9	12⅛″	4.9
SP-12	12	15½″	6.4

R METAL Racks and Cabinets

ENCLOSED RELAY RACKS



Deluxe



Rounded

DELUXE TYPE

mlined rack with removable vertical corner moldings. Made ¹⁄₁₆″ steel. Tapped 10/32 holes for either amateur or standard s. Standard finish gray ripple enamel; black optional. ed knocked down with all necessary bolts and screws.

. No.	Overall Size	Panel Space	Shpg. Wt. Lbs.	Net Each
-223	43¼″ x 22″ x 18″	36¾″	90	$52.20
-225	67¾″ x 22″ x 18″	61¼″	120	64.35
-227	83½″ x 22″ x 18″	77″	140	77.70

ROUNDED CORNER TYPE

ruction same as Deluxe type, but with rounded front cor- panels fit into a recess. Standard finish gray ripple enamel; optional.

. No.	Overall Size	Panel Space	Shpg. Wt. Lbs.	Net Each
-213	42″ x 22″ x 16½″	36¾″	85	$37.20
-215	66½″ x 22″ x 16½″	61¼″	110	54.90
-217	82¼″ x 22″ x 16½″	77″	130	66.30

UNDED CORNER TYPE WITH FRONT DOORS

ical with those listed above, except that they are equipped hinged front doors, as well as rear doors. No ventilation is ded in front doors and they are equipped with chrome plated es and locks. The front panel mounting angles are recessed allow clearance for dials, knobs, etc. This reduces the clear depth behind panels to 13½″.

. No.	Overall Size	Panel Space	Shpg. Wt. Lbs.	Net Each
-215	66½x22x16½″	61¼″	130	$73.92
-217	82¼x22x16½″	77″	155	89.10

SHELVES FOR CABINET RACKS

shelves are designed to fit into racks listed above. They are ructed to be mounted inside the racks, with side bolt mount- All shelves are 1″ high, and finished in black ripple enamel. ping weight 10 lbs.

M.	Will Fit Rack No.	Shelf Size	Net Each
112	ER-213, ER-215, ER-217	13″ x 21¹⁵⁄₁₆″	$3.60
12	ER-223, ER-225, ER-227	15″ x 21¹⁵⁄₁₆″	3.60
15	FD-215, FD-217	10⅝″ x 21¹⁵⁄₁₆″	3.60

CHANNEL RELAY RACKS

For Standard 19′ Rack Panels

Made from ¼″ pressed steel. Tapped 10-32 holes for either amateur or standard panels. The two vertical members and top cross brace securely welded; other parts shipped "knocked down". Necessary bolts and screws supplied. Black ripple enamel; for gray ripple add 10% to price except No. RR-197, add 5% to price.

P.M. No.	Overall Size	Panel Space	** Lbs.	Net Each
RX-195	74⁷⁄₁₆″ x 21″ x 20⅞″	71¾″	55	$23.10
RX-193	39⁷⁄₁₆″ x 21″ x 20⅞″	36¾″	45	19.80
RR-197*	80¾″ x 21⅛″ x 26″	77″	100	40.50

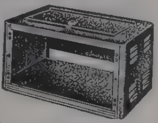
*Deluxe model. **Shipping Weight.

TABLE TYPE RELAY RACKS

ty relay rack that is useful where floor type heavy duty rack t required. Mounting holes are accurately drilled on universal rs. Tapped for 10-32″ screws. Finished in black ripple enamel. ed unassembled with all necessary screws. (Not illustrated.)

No.	Overall Size	Panel Space	Shipping Wt. Lbs.	Net Each
520	24 x 21 x 12″	21 x 19″	17	$8.10
220	31 x 21 x 12″	28 x 19″	20	9.90

DESK PANEL CABINET RACKS



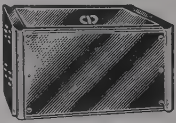
Streamlined styling. In keeping with our other Deluxe racks, the vertical front corners are rounded and the top and bottom are trimmed with chrome finished moldings. Panels fit into a recess, so that the edges are not exposed. Panel mounting holes accurately drilled on universal centers, for either "Amateur" or type "C" panels; holes are tapped for 10-32 machine screws. May be used with any chassis up to 13″ x 17″ in size. All cabinets constructed of ⅛″ thick sheet steel. Louvers provide ample ventilation through sides and back. Piano type hinges are used on the top doors, which are provided with snap catches. Panel mounting screws and washers are furnished. Black ripple enamel is standard. Slate gray is optional at same price.

With Door in Top Only

P. M. No.	Overall Size	Panel Space	Net Each
DL-128	10½″ x 21½″ x 15″ deep	8¾″	$14.19
DL-1210	12¼″ x 21½″ x 15″ deep	10½″	16.05
DL-1225	14″ x 21½″ x 15″ deep	12¼″	17.25
DL-1413	15¾″ x 21½″ x 15″ deep	14″	19.05

With Door in Top and Door on Rear Panel

P. M. No.	Overall Size	Panel Space	Net Each
DL-1713	19¼″ x 21½″ x 15″ deep	17½″	$21.90
DL-2613	28″ x 21½″ x 15″ deep	26¼″	25.50
DL-3513	36¾″ x 21½″ x 15″ deep	35″	28.20

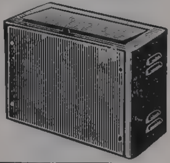


HINGED STEEL CABINETS DELUXE TYPE

A new Deluxe line featuring double roll front corners. Red striped chrome molding and chrome finished door pull. Piano hinged top. Gray ripple enamel finish. Removable front panel. Chassis not included in prices.

P. M. No.	Hgt., Lgth., Dia.	Panel Size	For Chassis	Net Each
CA-300	9″ x 12⅛″ x 8″	8½″ x 10″	7″ x 9″ x 2″	$ 6.39
CA-301	9″ x 16⅛″ x 8″	8½″ x 14″	7″ x 13″ x 2″	7.20
CA-302	10″ x 17⅛″ x 11″	9½″ x 15″	10″ x 14″ x 3″	11.40
CA-303	10″ x 20⅛″ x 9″	9½″ x 18″	8″ x 17″ x 3″	11.40
CA-304	13″ x 20⅛″ x 12″	12½″ x 18″	10″ x 17″ x 3″	12.90

HINGED STEEL CABINETS ROUNDED CORNER TYPE



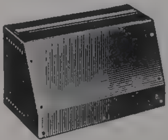
Front vertical corners are rounded. Piano hinged door. Louvers in sides. Opening at rear for cables, leads, etc. Gray ripple enamel finish. Removable front panel. Chassis not included in prices.

P. M. No.	Hgt., Lgth., Dia.	Panel Size	For Chassis	Net Each
CA-200	8½″ x 10⅛″ x 8″	8½″ x 8″	7″ x 7″ x 2″	$ 4.65
CA-201	8½″ x 12⅛″ x 8″	8½″ x 10″	7″ x 9″ x 2″	5.10
CA-202	8½″ x 16⅛″ x 8″	8½″ x 14″	7″ x 13″ x 2″	6.00
CA-203	9½″ x 17⅛″ x 11″	9½″ x 15″	10″ x 14″ x 3″	9.45
CA-204	12½″ x 20⅛″ x 12″	12½″ x 18″	10″ x 17″ x 3″	11.25

ROLLER TRUCKS FOR RACKS

Designed for above racks. Overall size is 3″ wider than rack for better weight distribution. Rubber composition wheels. Finished in slate gray ripple enamel and chrome trim. For gray hammertone add 10% to price. Shipping Weight, 22 lbs.

P.M. No.	Will Fit Racks	Net Each
RT-410	DL-1713, DL-2613, DL-3513	$10.08
RT-411	ER-213, ER-215, ER-217, FD-215, FD-217	10.56
RT-412	All 18″ deep racks	11.58
RT-418	All 18½″ deep racks	12.90
RT-420	All 22″ x 24″ deep racks	14.82



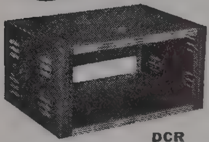
SLOPING FRONT CABINETS

Readily adapted as instrument cases for use in studios, laboratories, etc. A chassis may be mounted to a front panel and removed as a unit. Rear of case is ventilated, with an opening for connections. Rounded top corner. Slate gray ripple finish with a chrome molding. Prices are for cabinets only.

P. M. No.	Overall Size	For Chassis	Shpg. Wt. Lbs.	Net Each
SF-500	8″ x 8″ x 8″	7″ x 7″ x 2″	6	$ 4.59
SF-501	8″ x 10″ x 8″	7″ x 9″ x 2″	7	5.07
SF-502	8″ x 14″ x 8″	7″ x 13″ x 2″	8	5.46
SF-503	9″ x 18″ x 8″	7″ x 17″ x 3″	10	7.95
SF-504	12″ x 18″ x 12″	10″ x 17″ x 3″	14	10.20

Premier Cabinets and Racks

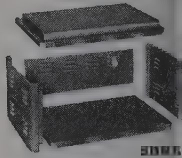
PREMIER DESK CABINET RACKS



DCR

15¼″ AND 18″ DEEP
ALL CABINETS 21¾″ WIDE
FOR STANDARD 19″ RACK PANELS

Made of 16 gauge steel. Finished in either black or gray wrinkle, gray or brown hammertone. Size: 21¾″ wide x 15¼″ deep, or 18″ deep. Top doors on SDR and SDRK models open to 90° and have rounded front corners.



SDRK

WITH DOOR IN TOP ONLY—15¼″ DEEP

ASSEMBLED CABINETS				KNOCKED-DOWN CABINETS						
Premier No.	Net Each	Premier No.	Net Each	Premier No.	Net Each	Premier No.	Net Each	Cabinet Ht.	Available Panel Space	Shippin Weigh Lbs.
DCR-70	$13.20	SDR-70	$18.09	SDRK-70	$17.40	DRK-70	$12.51	8¾″	7″	22
DCR-80	13.89	SDR-80	18.78	SDRK-80	18.09	DRK-80	13.20	10½″	8¾″	24
DCR-100	15.66	SDR-100	20.52	SDRK-100	19.86	DRK-100	14.97	12¼″	10½″	26
DCR-120	16.92	SDR-120	21.75	SDRK-120	21.06	DRK-120	16.20	14″	12¼″	28
DCR-140	18.78	SDR-140	23.64	SDRK-140	22.95	DRK-140	18.09	15¾″	14″	32

WITH DOOR IN TOP AND DOOR ON REAR—15¼″ DEEP

Premier No.	Net Each	Premier No.	Net Each	Premier No.	Net Each	Premier No.	Net Each	Cabinet Ht.	Available Panel Space	Shippin Weigh Lbs.
DCR-170	$22.26	SDR-170	$27.09	SDRK-170	$26.40	DRK-170	$21.57	19¼″	17½″	40
DCR-190	23.31	SDR-190	28.20	SDRK-190	27.48	DRK-190	22.62	21″	19¼″	42
DCR-210	24.18	SDR-210	29.25	SDRK-210	28.29	DRK-210	23.49	22¾″	21″	44

WITH DOOR IN TOP AND DOOR ON REAR—15¼″ DEEP

Premier No.	Net Each	Premier No.	Net Each	Premier No.	Net Each	Premier No.	Net Each	Cabinet Ht.	Available Panel Space	Shippin Weigh Lbs.
DCR-260	$26.10	SDR-260	$30.99	SDRK-260	$30.24	DRK-260	$25.41	28″	26¼″	45
DCR-310	27.48	SDR-310	32.34	SDRK-310	31.71	DRK-310	26.79	33¼″	31½″	50

WITH DOOR IN TOP AND DOOR ON REAR—15¼″ DEEP

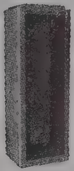
Premier No.	Net Each	Premier No.	Net Each	Premier No.	Net Each	Premier No.	Net Each	Cabinet Ht.	Available Panel Space	Shippin Weigh Lbs.
DCR-350	$28.86	SDR-350	$33.72	SDRK-350	$33.03	DRK-350	$28.17	36¾″	35″	55

18″ DEEP CABINET RACKS

	Premier No.	Net Each	Premier No.	Net Each	Cabinet Ht.	Available Panel Space	Shippin Weigh Lbs.
WITH DOOR IN TOP ONLY	DCR-1880	$16.71	SDR-1880	$21.58	10½″	8¾″	26
	DCR-18100	18.78	SDR-18100	23.64	12¼″	10½″	29
	DCR-18120	20.25	SDR-18120	25.11	14″	12¼″	31
	DCR-18140	22.53	SDR-18140	27.42	15¾″	14″	35
WITH DOOR IN TOP AND DOOR ON REAR	DCR-18170	26.70	SDR-18170	31.59	19¼″	17½″	44
	DCR-18190	27.99	SDR-18190	32.85	21″	19¼″	46
	DCR-18210	28.98	SDR-18210	33.87	22¾″	21″	48
WITH DOOR IN TOP AND DOOR ON REAR	DCR-18260	31.29	SDR-18260	36.15	28″	26¼″	49
	DCR-18310	32.97	SDR-18310	37.80	33¼″	31½″	55
WITH DOOR IN TOP AND DOOR ON REAR	DCR-18350	34.65	SDR-18350	39.48	36¾″	35″	60

ENCLOSED RELAY RACKS

Made of #16 gauge steel. Finished in black or gray wrinkle, gray or brown hammertone. Racks are 22″ wide x 18″ deep overall, and take standard 19″ panels.



DR Series

DELUXE TYPE

Premier No.	Ht., In.	P.S., In.	Wt., Lbs.	Net Each
DR-3619	43⅛	36¾	85	$54.00
DR-6119	67⅞	61¼	135	66.00
DR-7719	83⅜	77	160	79.89

ROUNDED TYPE

Premier No.	Ht., In.	P.S., In.	Wt., Lbs.	Net Each
R-3619	41⅞	36¾	80	$37.89
R-4219	47⅛	42	90	43.38
R-6119	66⅜	61¼	120	56.43
R-7719	82⅛	77	140	67.77

STANDARD TYPE

Premier No.	Ht., In.	P.S., In.	Wt., Lbs.	Net Each
RS-3619	41⅞	36¾	80	$37.89
RS-6119	66⅜	61¼	120	56.43
RS-7719	82⅛	77	140	67.77

MULTIPLE RACK UNITS

The above racks can be joined together to make multiple units by means of a solid center partition which is bolted to the top and bottom. When ordering multiple units, specify number of units, such as double, triple, etc.

EXAMPLES

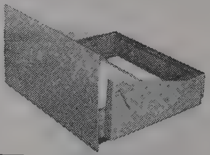
One Double R-3619 consists of one R-3619 and one MR-3619.

One Triple RS-3619 consists of one RS-3619 and two MR-3619.

SLIDING DRAWER

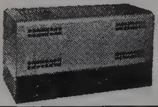
FITS STANDARD 19″ RACKS 15″ AND 18″ DEEP

Panel made of 12 ga. steel: chassis of #16 steel and has a 1″ flange on top and bottom to accomodate plywood for the record changer. Chassis on ball-bearing slides. Drawer extends 11″ from front of cabinet. In black or gray wrinkle, and gray or brown hammertone. Shipping Weights: RD-10, 15 lbs.; RD-12, 18 lbs.



Premier Number	Fits Rack Number	Panel Size, Inches	Chassis Size W.xD.xH.,In.	Net Each
RD-10 RD-12	R,RS, DCR18, SDR18, RM, RMA, FD	10⅜ x 18⅞ 12⅛ x 18⅞	17 x 16½ x 3 17 x 16½ x 4	$15.66 17.40
RD-10-14 RD-12-14	DCR, SDR, DRK, SDRK, R, RS, DCR-18, SDR-18, RM, RMA, FD	10⅛ x 18⅞ 12⅛ x 18⅞	17 x 14 x 3 17 x 14 x 4	15.54 17.25

AMPLIFIER FOUNDATION CHASSIS



Top cover has grille perforatio and rounded corners. Finished i gray wrinkle. Chassis is co structed of one piece with corne spot-welded. Finished in blac wrinkle. Cover depth, 6″.

Premier No.	Chassis Size, In.	Wt., Lbs.	Net Each
AF-510	5 x 10 x 3	9	$4.59
AF-615	6 x 14 x 3	10	5.29
AF-712	7 x 12 x 3	10	5.61
AF-812	8 x 12 x 3	10	5.61
AF-717	7 x 17 x 3	11	6.04
AF-1012	10 x 12 x 3	11	6.04
AF-1017	10 x 17 x 3	13	7.13
AF-1317	13 x 17 x 3	15	8.58

RELAY RACKS

CHANNEL TYPE

Made of #12 ga. steel and finished in black wrinkle.

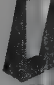
RR

Premier No.	Size, Inches			Panel Space, Inches	Shpg. Wt., Lbs.	Net Each
	H.	W.	D.			
RR-800	39¼	20	18⅜	36¾ x 19	40	$20.16
RR-801	74¼	20	20⅞	71¾ x 19	55	24.00
RR-802	79½	20	20⅞	77 x 19	60	27.78

TABLE TYPE

Premier No.	Dim., In. H. W. D.	P.S., In.	Wt., Lbs.	Net Each
TR-2119	25x21x12	21	17	$8.02
TR-2819	32x21x12	28	20	10.03

Made of #16 gauge steel and finished in black wrinkle.



TR

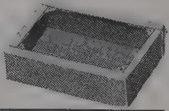
ROLLER TRUCKS FOR RACKS

Made of #16 gauge cold rolled steel. Supplied with 2″ dia. compo sition wheels. Finished in either black or gray wrinkle, gray o brown hammertone and has a red striped chrome molding.

Premier No.	Will Fit Rack No.	Inside Dim., In.	Shpg. Wt., Lbs.	Net Each
RT-1100	All 15¼″ Racks	15¾x22¼	22	$ 9.9
RT-1101	R, RS, DR, 18″ deep RM, FD, PR, DCR, SDR	18¾x22¾	22	12.5
RT-1102	RR-801, RR-802	20½x21½	22	13.8
RT-1105	24″ deep RM, FD, PR	24½x24½	23	15.6
RT-1110	RMA-27, FD-27	27½x24½	25	23.3
RT-1111	RM-7030	33½x24½	30	30.0

Premier Chassis and Cabinets

BLANK CHASSIS



ructed from one piece of #20 ga. cold rolled steel, except marked *, which are #16 ga.; aluminum chassis are #18 ga., t those marked **, which are #14 ga. Gussets are spot d to bottom flanges for additional strength. Flanges are d in on four sides and punched for bottom plates. Steel s finished in black wrinkle or zinc plated. Aluminum s are etched.

Steel Chassis				Aluminum Chassis		
emier No.	Weight, Lbs.	Net Each	Size, Inches	Premier No.	Weight, Lbs.	Net Each
H-400	1	$0.91	5½ x 9½ x 1½	ACH-400	½	$1.33
H-401	1½	1.26	5 x 10 x 3	ACH-401	¾	1.52
H-402	2½	1.48	6 x 14 x 3	ACH-402	1	2.57
H-403	1¼	1.07	7 x 7 x 2	ACH-403	½	1.33
H-404	1½	1.26	7 x 9 x 2	ACH-404	½	1.39
H-405	1⅞	1.29	7 x 11 x 2	ACH-405	¾	1.52
H-406	2	1.40	7 x 13 x 2	ACH-406	¾	1.64
H-407	2¾	1.67	7 x 15 x 3	ACH-407	1	2.89
H-408	2¼	1.50	4 x 17 x 3	ACH-408	1	2.36
H-409	3⅛	1.83	7 x 17 x 3	ACH-409	1½	2.85
H-410	2¾	1.67	8 x 17 x 2	ACH-410	1⅛	2.89
H-411	5¼	1.83	8 x 17 x 3	ACH-411	1½	3.00
H-412	2¾	1.76	10 x 12 x 3	ACH-412	1¼	2.68
H-413	3¼	1.86	10 x 14 x 3	ACH-413	1¼	3.40
H-414	3¼	1.92	10 x 17 x 2	ACH-414	1¼	3.26
H-415*	6	2.16	10 x 17 x 3	ACH-415**	1⅞	3.65
H-416*	7½	2.39	10 x 17 x 4	ACH-416**	2	4.20
H-417*	5¼	2.62	11 x 17 x 2	ACH-417**	1¾	3.48
H-418*	6¼	2.87	11 x 17 x 3	ACH-418**	2	4.27
H-419*	5	1.99	12 x 17 x 2	ACH-419**	1⅞	3.81
H-420*	7	2.40	12 x 17 x 3	ACH-420**	2⅛	4.51
H-421*	8½	2.62	12 x 17 x 4	ACH-421**	2⅞	4.98
H-422*	6	2.87	13 x 17 x 2	ACH-422**	1⅞	4.02
H-423*	7	3.31	13 x 17 x 3	ACH-423**	2⅛	4.79
H-424*	10	3.78	13 x 17 x 4	ACH-424**	2½	5.48
H-425	2¼	1.40	7 x 11 x 3	ACH-425	⅞	1.64
H-426	1	1.04	5 x 7 x 2	ACH-426	¼	1.09
H-427	3	1.92	8½ x 15 x 3	ACH-427	1¼	2.91
H-428	1¼	1.06	5 x 7 x 3	ACH-428	¼	1.50
H-429	2	1.56	5 x 13 x 3	ACH-429	¾	1.80
H-430	2½	1.67	8 x 12 x 3	ACH-430	1	2.19
H-431	1	1.01	4 x 6 x 2	ACH-431	¼	1.29
H-432	1	1.04	4 x 6 x 3	ACH-432	¼	1.33
H-433	2½	1.46	7 x 12 x 3	ACH-433	⅞	1.83
H-434	4	1.76	6 x 17 x 3	ACH-434	1	2.70
H-435*	10	2.74	10 x 23 x 3	ACH-435**	2½	5.37
H-436	¾	1.04	4 x 6 x 1½	ACH-436	¼	1.09
H-437	1	1.07	4 x 8 x 2	ACH-437	⅜	1.13
H-438*	13	5.42	17 x 17 x 4	ACH-438*	3	10.79
H-439*	8½	2.89	10 x 17 x 5	....	......	....
H-440*	11	4.26	13 x 17 x 5	....	......	....
H-441	2½	1.42	8 x 10 x 2½	ACH-441	1	1.68

UMINUM MINIATURE CASES

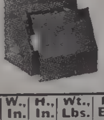
o-piece case made of No. 16 gauge aluminum. Natural aluminum finish ay hammertone.

minum Finish		Gray Ham. Finish			
mier o.	Net Each	Premier No.	Net Each	Size, Inches L. x W. x H.	Wt. Lbs.
-1000	$0.70	PMC-1000	$0.79	2¾ x 2⅛ x 1⅝	¼
-1001	.70	PMC-1001	.79	3¼ x 2⅛ x 1⅝	¼
-1002	.73	PMC-1002	.83	4 x 2⅛ x 1⅝	¼
-1003	.96	PMC-1003	1.06	4 x 2¼ x 2¼	⅜
-1004	.99	PMC-1004	1.09	5 x 2¼ x 2¼	⅜
-1005	1.17	PMC-1005	1.23	5 x 4 x 3	½
-1006	1.09	PMC-1006	1.19	5¼ x 3 x 2⅛	½
-1007	1.39	PMC-1007	1.53	6 x 5 x 4	1
-1008	1.56	PMC-1008	1.69	7 x 5 x 3	¾
-1009	2.31	PMC-1009	2.45	8 x 6 x 3½	1⅛
-1010	2.88	PMC-1010	3.04	10 x 6 x 3½	1½
-1011	3.24	PMC-1011	3.57	12 x 7 x 4	1¾
-1012	3.84	PMC-1012	4.20	17 x 5 x 4	2
-1013	1.17	PMC-1013	1.23	10 x 2 x 1⅝	½
-1014	1.53	PMC-1014	1.65	12 x 2½ x 2¼	¼
-1015	.93	PMC-1015	1.20	4 x 2 x 2¾	¼
-1016	.96	PMC-1016	1.06	4¼ x 2¼ x 1½	¼

SLOPING FRONT CABINETS

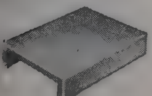
of #20 gauge steel. Finished in black wrinkle.

mier o.	Size, Inches H. x W. x D.	Wt., Lbs.	Net Each
-500	8 x 8 x 8	6	$4.26
-501	8 x 10 x 8	7	4.74
-502	8 x 14 x 8	8	5.07
-503	9 x 18 x 8	10	7.29
-504	12 x 18 x 12	14	9.30



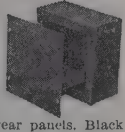
OPEN END CHASSIS

of #20 gauge steel and lated.



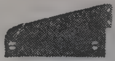
Premier No.	D., In.	W., In.	H., In.	Wt., Lbs.	Net Each
CH-1300	7	6	2	1	$0.80
CH-1301	5	7	1½	¾	.73
CH-1302	7	7	1½	1	1.16
CH-1303	7	8	2	1	1.03
CH-1304	5½	9	1½	1	.87
CH-1305	7½	9	1½	1	1.16
CH-1306	7	10	2	1¼	1.11
CH-1307	7	11	1½	1¼	1.25
CH-1308	7	13	1½	1½	1.46
CH-1309	10¾	14	2	2½	1.75
CH-1310	7¾	15	2	2	1.67

STEEL UTILITY CASES WITH CHASSIS ATTACHED



Made of No. 20 gauge steel with a chassis spot welded to front panel. Removable front and rear panels. Black wrinkle finish.

Premier No.	Size, Inches W. x D. x H.		Shpg. Wt., Lbs.	Net Each
	Case	Chassis		
CA-1400	4x2x4	2⅞x1⅞x1	1	$1.22
CA-1401	5x3x4	3⅞x2⅞x1	1¼	1.42
CA-1402	4x3x5	2⅞x2⅞x1¼	1¼	1.42
CA-1403	5x4x6	3⅞x3⅞x1¾	2	1.78
CA-1404	6x4x5	4⅞x3⅞x1¼	2	1.78
CA-1405	6x6x6	4⅞x5⅞x1¾	3	1.85



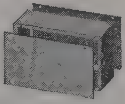
CHASSIS MOUNTING BRACKETS

Made of #16 ga., finished in black enamel.

Premier No.	For	Wt., Lbs.	Net Each
CB- 78*	8″ Chassis	1½	$0.96
CB-710*	10″ Chassis	1¾	1.29
CB-711*	11″ Chassis	2	1.39
CB-712*	12″ Chassis	2⅛	1.51
CB-713*	13″ Chassis	2¼	1.62
CB-717*	17″ Chassis and larger	3	2.51
CB-810†	10″ Chassis	2⅜	1.91
CB-813†	13″ Chassis	3	2.02

*Notched for 3″ chassis.
†Notched for 4″ chassis.

UTILITY CASES



Made of 20 ga. sheet steel with flanged edges, spot-welded corners and two removable flat covers. Finished in black wrinkle. Aluminum cases are of No. 16 gauge.

STEEL CASES

Premier No.	Size, Inches	Wt., Lbs.	Net Each	Premier No.	Size, Inches	Wt., Lbs.	Net Each
C-442	4x 4x 2	2	$0.93	C-695	6x 9x 5	5	$2.02
C-453	4x 5x 3	3	1.08	C-8101	8x10x10	7	3.30
C-596	5x 9x 6	5	2.02	C-564	5x 6x 4	4	1.28
C-666	6x 6x 6	3	1.46	C-754	7x 5x 4	4	1.39
C-1276	12x 7x 6	6	2.74				

ALUMINUM CASES

Natural Aluminum				Gray Hammertone	
Premier No.	Net Each	Size, In. W. x L. x H.	Wt., Lbs.	Premier No.	Net Each
AC-442	$1.26	4 x 4 x 2	½	PAC-442	$1.39
AC-453	1.39	4 x 5 x 3	¾	PAC-453	1.62
AC-564	1.65	5 x 6 x 4	1	PAC-564	2.02
AC-596	2.71	5 x 9 x 6	1½	PAC-596	3.07
AC-666	1.89	6 x 6 x 6	1½	PAC-666	2.11
AC-695	2.71	6 x 9 x 5	1½	PAC-695	3.07
AC-1276	3.73	12 x 7 x 6	2¼	PAC-1276	4.14
AC-1597	5.10	15 x 9 x 7	3½	PAC-1597	5.65

HINGED TOP CABINETS

ROUNDED CORNER TYPE

Made of 20 gauge steel. Finished in gray wrinkle.

Premier No.	Size, Inches H. x W. x D.	Wt., Lbs.	Net Each
HTC-200	8x10x8	6	$4.19
HTC-201	8x12x8	6½	4.54
HTC-202	8x16x8	6½	5.89
HTC-203	9x17x11	11	9.13
HTC-204	12x20x12	13½	10.80
HTC-205	8x14x8	7¼	5.23

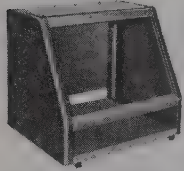
STEEL AND ALUMINUM SLOPING PANEL CABINETS

Made of No 20 gauge steel. Round top corners with sloping front. Black wrinkle finish. Aluminum cabinets are of No. 18 gauge (.040) aluminum with natural aluminum finish.

Steel				Aluminum	
Premier No.	Shpg. Wt., Lbs.	Net Each	Size, Inches W. x D. x H.	Premier No.	Net Each
SPC-1200	¾	$1.14	4 3/16 x 4¼ x 4½	ASPC-1200	$1.37
SPC-1201	1	1.29	5 3/16 x 4¼ x 4½	ASPC-1201	1.55
SPC-1202	1	1.47	6 3/16 x 4¼ x 4½	ASPC-1202	1.76
SPC-1203	1½	1.77	7 3/16 x 4¼ x 4½	ASPC-1203	2.12

Premier Modular Consoles

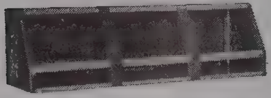
PREM-O-RAK® CONSOLE SLOPING CABINET



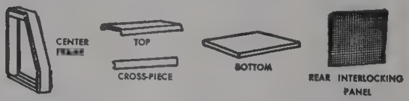
May be used individually or joined together for multiple installations. Convenient design permits mounting components on base before rack is assembled into complete unit. Neat design has ball corners on front and rear; assembly screws are hidden from outside view. Both front and rear are tapped for 10-32 machine screws on universal spacings. Interlocking removable rear panel is perforated metal, held in place by four captive screws; has 1¾″ opening on bottom for leads, etc. Base has side knockouts for leads; furnished with four rubber feet. Panels fit into ½″ recess. Made of No. 16 gauge steel. **Size:** 21¾″ w. x 18″ d. x 18⅛″ h. **Panel Space:** 12¼″ x 19″, sloping (30°) upper panel; 3½″ x 19″, lower panel; 15¾″ x 19″, rear panel. **Finish:** Two-tone hammertone with top, cross-piece and base in gray; rear and side panels in brown. Shipping Weight, 35 lbs.

Premier No. CSC-201—Single unit. Net Each........ $\$49^{80}$

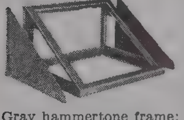
FOR MULTIPLE INSTALLATION



Premier No. CMS-301—Add-on unit for multiple installation. Includes top, crosspiece, bottom, rear panel and center frame section to combine units together. (For a double unit, order one CSC-201 and one CMS-301; for a triple unit, order one CSC-201 and two CMS-301; etc.). Shipping Weight, 26 lbs. Net Each.................. $\$30^{00}$



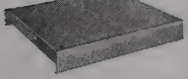
PREM-O-RAK® TURRET WITH FLAT SIDE PANELS



Neat two-tone design made of 16 gauge steel; flat side panels are assembled at factory before shipping. All panel openings tapped 10-32 for machine screws on universal spacings. Panels fit into ½″ recess. **Size:** 22″ w. x 12¼″ x 17½″. **Panel Space:** 17½″ x 19″, sloping front mounts either 35° or 55° from vertical; 8¾″ x 19″, rear panel; 14″ x 19″ bottom panel. **Finish:** Gray hammertone frame; brown hammertone side panels. Shipping Weight, 20 lbs.

Premier No. TUR-3—Net Each.................... $\$34^{80}$

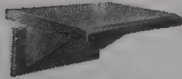
WORK TOP FOR MULTIPLE ASSEMBLY



Convenient unit designed for mounting between 2 pedestal frames (used in conjunction with short end panels, No. CSS-701). Tops of front and rear are rounded. Made of 16 gauge steel. **Size:** 22″ w. x 22″ d. x 3″ h. **Finish:** Gray hammertone. Shipping Weight, 14 lbs.

Premier No. CWT-601—
Net Each.. $\$12^{60}$

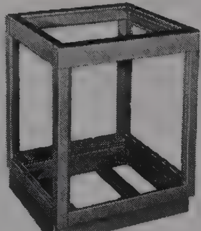
WRITING SHELF



For single or multiple units; 2 knockouts on each side are used for multiple installation. Rounded front top made of 16 gauge steel and bolted to a standard 7″ x 19″ formed panel. Shipped knocked down with all necessary hardware for easy assembly. **Size:** 22″ w. x 16″ d. x 1½″ h. **Finish:** Specify gray or brown hammertone. Shipping Weight, 17 lbs.

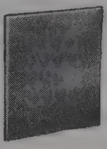
Premier No. CWS-501—Net Each.................. $\$15^{00}$

PREM-O-RAK® CONSOLE PEDESTAL CABINET FRAME



Designed for multiple installatio
front and rear of top are rounded f
neat appearance. Frame is made
16 ga. steel. Adjustable panel moun
ing angles of 12 ga. steel are tapp
10-32 front and rear on univers
spacings. Brackets are welded
base and punched to take CA-
casters; two cross ties are welded
base for anchoring to floor. Pan
fit into ½″ recess. **Size:** 22″ w.
29½″ h. x 22″ d. (30″ h. with ca
ters). **Panel Space:** 21″ x 19″, fro
and rear; 17½″ x 19″, top. **Finish**
Gray hammertone. Shpg. Wt., 45 l
Premier No. CPF-101— $\$56^{0}$
Net Each................

END PANELS

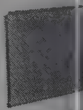


Made of one-piece 16 gauge steel. Designed f
easy installation and access, panels attach t
pedestal frame by means of two brackets on bo
tom; held securely with two captive screws
top. **Finish:** Brown hammertone.
Premier No. CEP-401 End Panel—Ball cornere
Size: 22″ w. x 26″ h. x 1 11/32″ d. Shipping $\$15^{0}$
Weight, 17 lbs. Net Each...........
Premier No. CSS-701 Short End Panel—Use
only when work top is mounted between tw
pedestal frames. Size: 22″ w. x 1 11/32″ d. $\$9^{0}$
x 23″ h. Shipping Weight, 15 lbs. Net Ea..

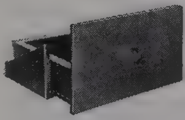
INTERLOCKING REAR PANELS

Made of one-piece 20 gauge steel; 19″ wide for use with pedestal frame, above. Furnished with four captive screws. **Finish:** Brown hammertone.

Premier Number	Height, In.	Type	Shpg. Wt., Lbs.	Net Each
PP-17	17½	Perforated	5	**$7.50**
PP-21	21	Perforated	6	**8.40**
PS-17	17½	Blank	6	**6.00**
PS-21	21	Blank	7	**6.72**



SLIDING DRAWER ASSEMBLY



Handy drawer mounted on ba
bearing suspension slides which ca
sustain 40 lbs Entire unit mounts t
the rear of the tapped holes of th
panel mounting angles of the cab
inet. Fits No. CPF-101 cabinets, 18
deep "Prem-O-Rak" POR Serie
and PR racks; also fits FP and FP
Series when used with other forme
panels. Drawer extends 11″ fro
front of cabinet. Made of heavy gauge steel and furnished wi
round, chrome plated handle. Shipped knocked down with a
necessary hardware for easy assembly. **Size:** 17″ w. x 16½″ d
6″ h., drawer; 10⅜″ x 18⅞″, panel. **Finish:** Specify gray or brow
hammertone. Shipping Weight, 23 lbs. $\$18^{0}$
Premier No. D-1916—Net Each......................

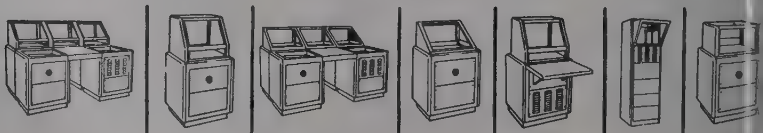
19″ FORMED PANELS

Blank or louvered panels of one-piece 16 gauge steel with edge
formed for ½″ depth. Each panel has only 2 mounting holes o
each side **Finish:** Specify gray or brown hammertone.

Premier Number	Height, Inches	Type	Shpg. Wt., Lbs.	Net Each
FP-319	3½	Blank	2	**$1.14**
FP-519	5¼	Blank	2	**1.32**
FP-719	7	Blank	3	**1.50**
FP-819	8¾	Blank	4	**1.83**
FP-1019	10½	Blank	5	**2.25**
FP-1219	12¼	Blank	6	**2.61**
FP-1419	14	Blank	6	**2.94**
FP-1519	15¾	Blank	7	**3.39**
FP-1719	17½	Blank	7	**3.75**
FP-1919	19¼	Blank	8	**4.11**
FP-2119	21	Blank	9	**4.50**
FPL-719	7	Louvered	3	**3.15**
FPL-819	8¾	Louvered	4	**3.54**
FPL-1019	10½	Louvered	5	**3.90**
FPL-1219	12¼	Louvered	6	**4.41**
FPL-1419	14	Louvered	6	**4.74**
FPL-1719	17½	Louvered	7	**5.55**
FPL-2119	21	Louvered	9	**6.90**

PREM-O-RAK® FLEXIBLE SYSTEMS

These are a few of the unlimited variety of arrangements made possible with the standard, flexible "Prem-O-Rak" units designed for function and beauty.



Premier Transmitter Racks

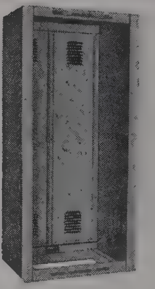
.VY-DUTY RACKS FOR , 24" AND 30" PAN- WITH AND WITH- ' FRONT DOORS 18") 24" DEEP.

:M Series racks can be fur- :d with adjustable panel :ting angles at no addi- l cost. Specify as "RMA". acks are supplied without :rs on sides unless specified.

tructed of #16 gauge steel with #12 e bottom; welded throughout. Panel ting angles are 3⁄16" thick; tapped 12- universal spacings. Racks are sup- with or without louvers. Rear doors nung on sturdy loose-jointed hinges losed by a chrome handle. A rectan- cutout in bottom is made for leads. Duplex receptacle and outlet box sup- in the back under the door. Tops and oms trimmed with red striped chrome ing. **Series RM and RMA:** Have ver- rounded corner moldings. Adjustable mounting angles supplied on RMA ; fit any distance from front by use of nel slides. **Model RM-7030:** Supplied double rear doors and 3-point locking e. **Series FD:** Supplied with locking le on front door; panel mounting angles stable to any distance from front by nel slides. **Specify:** Black or gray kle, gray or brown hammertone finish. lor is not specified, black wrinkle will rnished.

RM

RMA


RM-7030

FD

RACKS WITHOUT DOORS

18" DEEP RACKS

Premier Number	Size, In. H. x W.	Panel* Ht., In.	Wt.,§ Lbs.	Net Each
RM-3619	42⅞x22	36¾	100	$66.15
RM-4219	48⅛x22	42	130	78.00
RM-6119	67⅜x22	61¼	150	86.01
RM-7618	76⅛x22	70	170	105.84
RM-7719	83⅛x22	77	190	109.20

24" DEEP RACKS

Premier Number	Size, In. H. x W.	Panel* Ht., In.	Wt.,§ Lbs.	Net Each
RM-3624	42⅞x23⅝	36¾	110	$84.00
RM-4224	48⅛x23⅝	42	130	93.05
RM-6124	67⅜x23⅝	61¼	175	122.40
RM-7019	76⅛x23⅝	70	200	132.30
RM-7724	83⅛x23⅝	77	225	148.86
RM-7030	76⅛x33	70†	240	191.85
RMA-2742	48⅛x27	42‡	170	120.78
RMA-2761	67⅜x27	61¼‡	210	137.58
RMA-2770	76⅛x27	70‡	240	148.59
RMA-2777	83⅛x27	77‡	270	165.39

*19" wide unless otherwise noted. †30" wide. ‡24" wide. §Shipping.

RACKS WITH DOORS

18" DEEP RACKS

Premier Number	Size, In. H. x W.	Panel* Ht., In.	Wt.,§ Lbs.	Net Each
FD-3619	42⅞x22	36¾	115	$102.39
FD-4219	48⅛x22	42	120	108.00
FD-6119	67⅜x22	61¼	175	115.77
FD-7019	76⅛x22	70	200	132.30
FD-7719	83⅛x22	77	220	142.23

24" DEEP RACKS

Premier Number	Size, In. H. x W.	Panel* Ht., In.	Wt.,§ Lbs.	Net Each
FD-3624	42⅞x23⅝	36¾	125	$100.80
FD-4224	48⅛x23⅝	42	150	111.00
FD-6124	67⅜x23⅝	61¼	200	152.16
FD-7024	76⅛x23⅝	70	255	158.76
FD-7724	83⅛x23⅝	77	270	181.89
FD-2742	48⅛x27	42‡	180	140.19
FD-2761	67⅜x27	61¼‡	230	165.39
FD-2770	76⅛x27	70‡	260	176.22
FD-2777	83⅛x27	77‡	290	198.45

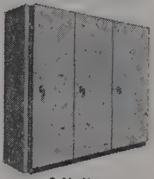
*19" wide unless otherwise noted. ‡24" wide. §Shipping.

77 With 7 Panels

Unit Without Doors

HEAVY-DUTY TRANSMITTER RACKS FOR MULTIPLE INSTALLATIONS FOR 19", 24" AND 30" PANELS 18" AND 24" DEEP

Constructed of heavy gauge steel, welded throughout. Panel mounting angles 3⁄16" thick are tapped 12-24 on universal spacings; adjustable to any position. Front and rear doors are hung on loose jointed hinges; equipped with locking handle. Doors for 19" and 24" cabinets are hinged for right or left opening by rotating door 180°. Doors and side panels are shipped blank; louvers furnished at no additional cost if specified. Rectangular cutout provided in bottom for leads, etc. Tops are supplied either solid or with cutout at no additional charge. Sides are detachable to permit multiple assembly of cabinets in double, triple or larger units by bolting together; sides clip onto horizontal sections of frame. Racks for 30" panel spaces are supplied with double doors and 3-point locking device. **Specify:** Black or gray wrinkle, gray or brown hammertone finish. Black wrinkle is furnished unless color is specified.


3 Units Assembled

Note: These units can be supplied as a frame only, or as a frame and one door only.

FRAMES AND DOORS

unit consists of 1 frame and 2 doors. Width: 22" for 19" panel width units; 27" for 24" width units; 33" for 30" panel width units. :s are 13⁄16" thick.

ight, n.	Panel Space, Inches H. x W.	Door Size, In. H. x W.	18" Deep Units			24" Deep Units		
			Premier Number	Shpg. Wt., Lbs.	Net Each	Premier Number	Shpg. Wt., Lbs.	Net Each
8⅛	42 x 19	45 9⁄16 x 21½	PR-42	130	$ 99.60	PR-42-24	150	$123.60
7⅜	61¼ x 19	64 13⁄16 x 21½	PR-61	140	138.93	PR-61-24	168	166.71
6⅛	70 x 19	73 9⁄16 x 21½	PR-70	150	158.76	PR-70-24	180	190.56
3⅛	77 x 19	80 9⁄16 x 21½	PR-77	165	165.39	PR-77-24	198	202.80
7⅜	61¼ x 24	64 13⁄16 x 26½	PR-2761	168	159.77	PR-2761-24	202	181.58
6⅛	70 x 24	73 9⁄16 x 26½	PR-2770	180	182.58	PR-2770-24	216	209.96
3⅛	77 x 24	89 9⁄16 x 26½	PR-2777	198	190.20	PR-2777-24	238	218.73
7⅜	61¼ x 30	64 13⁄16 x 32½	PR-3361*	202	181.58	PR-3361-24*	242	208.82
6⅛	70 x 30	73 9⁄16 x 32½	PR-3370*	216	209.96	PR-3370-24*	259	241.46
3⅛	77 x 30	80 9⁄16 x 32½	PR-3377*	238	218.73	PR-3377-24*	286	251.54

h front and rear supplied with double doors.

SIDE PANELS

individually; not as pairs.

ight, In.	18" Deep Panels				24" Deep Panels			
	Premier Number	Size, In. W. x D.	Shpg. Wt., Lbs.	Net Each	Premier Number	Size, In. W. x D.	Shpg. Wt., Lbs.	Net Each
8	SP-42	15 x 1½	20	$16.56	SP-42-24	21 x 1½	22	$21.36
67¼	SP-61	15 x 1½	23	21.54	SP-61-24	21 x 1½	28	25.83
76	SP-70	15 x 1½	26	23.16	SP-70-24	21 x 1½	31	27.78
3	SP-77	15 x 1½	28	24.90	SP-77-24	21 x 1½	34	30.00

Premier Chassis and Cabinets

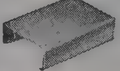
ALUMINUM VERTICAL PANEL CHASSIS

TO FIT 19" STANDARD RACKS

Made of 14 gauge (.064) aluminum. Flanges are notched for standard rack mounting. All chassis depths are 5⁹⁄₁₆". Gussets are spot welded in each corner for greater strength. Etched finish.

No. ACH-	-1200	-1201	-1202	-1203	-1204	-1205	-1206	-1207
Height, In.	1¾	3½	5¼	7	8¾	10½	12¼	14
Shpg. Wt., Lbs.	¾	1¾	1½	2	2¼	2¾	3	3¼
Net Each	$2.55	$2.79	$3.04	$3.51	$4.14	$4.44	$4.95	$5.35

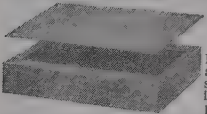
ALUMINUM OPEN END CHASSIS



Made of .040 aluminum natural finish. Shipping Weights: Chassis Nos. ACH-1350 through ACH-1356, ¼ lb. Chassis Nos. ACH-1357 through ACH-1360, ½ lb.

No. ACH-	Size, Inches D. x W. x H.	Net Each	No. ACH-	Size, Inches D. x W. x H.	Net Each
1350	2⅝ x 2¾ x 1¼	37c	1356	5¾ x 4⅞ x 1½	55c
1351	1¾ x 3⅛ x 1	41c	1357	4 x 3⅛ x 1	44c
1352	3¼ x 4½ x 2	44c	1358	4 x 4⅛ x 1	48c
1353	2¾ x 4⅛ x 1	44c	1359	4 x 5⅛ x 1	51c
1354	3¾ x 4⅛ x 1½	44c	1360	4 x 6⅛ x 1	55c
1355	3 x 6⅛ x 1¼	52c			

REMOVABLE TOP CHASSIS



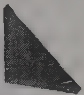
Made of 16 ga. cold rolled steel. Top and bottom edges flanged on four sides. Top plate is removable. Finished in either black wrinkle or zinc plated. State finish wanted.

Premier No.	Size, Inches	Shpg. Wt.	Net Each
RCH-415	10 x 17 x 3 deep	5 lbs.	$4.01
RCH-416	10 x 17 x 4 deep	5 lbs.	4.46
RCH-423	13 x 17 x 3 deep	9 lbs.	4.20
RCH-424	13 x 17 x 4 deep	10 lbs.	5.18

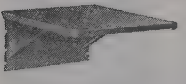
TRIANGULAR CHASSIS MOUNTING BRACKETS

16 gauge steel. Black enamel. Sold in pairs.

Prem. No.	Height x Depth	Shpg. Wt.	Net Each
TCB-55	5" x 5"	1 lb.	$0.99
TCB-77	7" x 7"	1 lb.	1.12
TCB-99	9" x 9"	1½ lbs.	1.36



DESK PANELS



16 ga. steel bolted to standard 10½" x 19" panel. Front corners rounded. 22" wide. Shipped knocked down. Black or gray enamel, gray or brown hammertone.

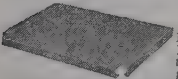
Premier No. DP-1016—16" deep. Shpg. Wt., 20 lbs. Net. **$14.91**
Premier No. DP-1020—20" deep. Shpg. Wt., 22 lbs. Net. **15.24**

CHASSIS SUPPORTS

Made of #12 ga. steel. Finished in black enamel. Sold in pairs only.

No.	Size, In.	Shpg. Wt., Lbs.	Net Ea.
CS-12	12x3x3	4	$1.92
CS-14	14½x3x3	5¼	2.10

RACK SHELF



Made of one piece 16 ga. cold rolled steel 1" high. Holes on sides for mounting on rack. State black or gray wrinkle or gray or brown hammertone.

Premier No.	Will Fit Rack	Shelf Size, In.	Shpg. Wt., Lbs.	Net Each
RS-1106	All 15¼" SDR & DCR	12 x 21⁹⁄₁₆	7	$2.82
RS-1107	R, RS, DR, 18" RM, DCR, SDR	15 x 21¹³⁄₁₆	7	3.48
RS-1108	18" deep FD	13 x 21¹³⁄₁₆	7	3.15
RS-1109	24" deep RM, FD	22 x 23⁷⁄₁₆	7	5.64
RS-1110	RMA-27, FD-27 Series	22 x 26⅞	8	6.60
RS-1111	MDK Series	10 x 21⁹⁄₁₆	6	2.70

FRONT DOORS TO FIT STANDARD 19" DESK RACK CABINETS AND ENCLOSED RACKS

Constructed of one piece of 16 ga. steel. Cylinder lock and angle bracket incl. All necessary bolts included for easy assembly. 20½" wide x 1¼" deep. Chrome handles furnished with FD-310-313 models. Black or gray wrinkle, gray or brown hammertone.

Prem. No.FD-	Door Ht.	Shpg. Wt.	Net Each	Prem. No.FD-	Door Ht.	Shpg. Wt.	Net Each
300	26¼"	10 lbs.	$12.75	306	21"	9 lbs.	$12.21
301	31½"	11 lbs.	14.82	310	36⅞"	13 lbs.	18.27
302	35"	12 lbs.	16.53	311	42⅛"	15 lbs.	20.85
303	12¼"	6 lbs.	9.60	312	61⅜"	20 lbs.	24.33
304	14"	7 lbs.	10.44	313	77⅛"	24 lbs.	27.81
305	17½"	8 lbs.	11.34				

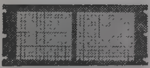
REVERSIBLE BLANK RACK PANELS

19" WIDE

For racks with multiple 1¼"-½" spacing. Made of #12 gauge steel or ⅛" aluminum. Finishes: Reversible black or gray wrinkle and reversible gray and brown hammertone.

ALUMINUM				STEEL		
Premier No.	Wt., Lbs.	Net Each	Height	Premier No.	Wt., Lbs.	Net Each
ARP-119	½	$1.01	1¾"	RP-119	1	$0.77
ARP-319	1	1.36	3½"	RP-319	2	.88
ARP-519	1½	1.86	5¼"	RP-519	3	1.09
ARP-719	2	2.24	7"	RP-719	4	1.26
ARP-819	2½	2.68	8¾"	RP-819	5¼	1.54
ARP-1019	3	3.37	10½"	RP-1019	6¼	1.86
ARP-1219	3½	3.94	12¼"	RP-1219	7¼	2.21
ARP-1419	4	4.51	14"	RP-1419	8¼	2.55
ARP-1519	4	5.04	15¾"	RP-1519	9	2.87
ARP-1719	4¾	5.54	17½"	RP-1719	10½	3.15
ARP-1919	5	6.08	19¼"	RP-1919	12	3.50
ARP-2119	6	6.62	21"	RP-2119	12½	3.85

PANELS—19" WIDE

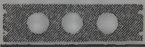


Made of No. 12 gauge steel. Finished either black or gray wrinkle, gray or brow hammertone. Specify color when orderin If color is not specified, black wrinkle w be furnished.

GRILLE PANELS

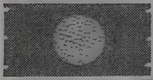
Premier No.	Grille Size	Height	Shpg. Wt., Lbs.	Net Each
GRP-601	3⅞" x 13⅜"	5¼"	2	$3.09
GRP-602	3⅞" x 13⅜"	7"	2	3.31
GRP-603	5⅞" x 13⅜"	8¾"	2½	4.00
GRP-604	3⅞" x 13⅜"*	8¾"	2½	3.68
GRP-605	7⅞" x 13⅜"	10½"	2½	4.38
GRP-606	5⅞" x 13⅜"*	10½"	2½	4.00
GRP-607	7⅞" x 13⅜"*	12¼"	3	4.54

*Allows 3½" space at bottom for chassis mounting.



METER PANELS 5¼" HIGH

Premier No.	No. of Holes	Meter Size	Hole Size	Shpg. Wt., Lbs.	Net Each
MRP-900	3	2"	2¼"	7	$1.62
MRP-901	5	2"	2¼"	7	2.19
MRP-902	3	3"	2¹³⁄₁₆"	7	1.62
MRP-903	5	3"	2¹³⁄₁₆"	7	2.19

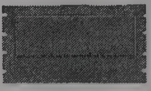


SPEAKER PANELS

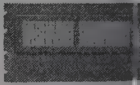
A piece of perforated metal is spot-weld behind the opening.

Premier No.	Height	Speaker Size	Hole Size	Shpg. Wt., Lbs.	Net Each
SRP-819	8¾"	6"	4⅝"	6	$2.88
SRP-1019	10½"	8"	6½"	8	3.66
SRP-1219	12¼"	10"	8½"	9	4.38
SRP-1419	14"	12"	11"	10	5.04

DOOR PANELS



Flush hinged doors with piano hinges. Supplied with a quick turn fastener. Doors located 1" from top to allow space for chassis at bottom.



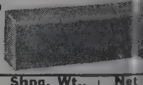
Standard Type					Grille Type	
Prem. No.	Net Each	Height	Door Size	Shpg. Wt., Lbs.	Prem. No.	Net Each
DRP-700	$5.12	8¾"	4½"x15⅜"	9	GDRP-700	$6.5
DRP-701	5.48	10½"	6" x15⅜"	10	GDRP-701	7.1
DRP-702	6.04	12¼"	7½"x15⅜"	12	GDRP-702	7.8

SIDE HINGED DOOR PANELS

Used for left or right hand openi Supplied with a quick turn fasten

Premier No.	Height	Net Ea.	Premier No.	Height	Net Ea.
SHP-319	3½"	$3.00	SHP-1019	10½"	$3.96
SHP-519	5¼"	3.12	SHP-1219	12¼"	4.23
SHP-719	7"	3.42	SHP-1419	14"	4.59
SHP-819	8¾"	3.66	SHP-2119	21"	7.26

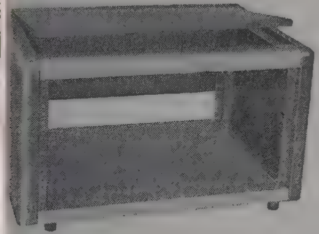
PERFORATED TYPE COVERS



Cover made of perforated steel and has rounded corners with solid ends. Finished in gray wrinkle. Height 6" except (*), 4".

Prem. No.	Size, In. W. x D.	Use Chassis Number	Shpg. Wt., Lbs.	Net Each
PC-57	7 x 5*	ACH or CH-426	1	$3.0
PC-510	10 x 5	ACH or CH-401	1¾	3.1
PC-615	14 x 6	ACH or CH-402	2⅜	3.60
PC-717	17 x 7	ACH or CH-409	3	3.96
PC-1012	12 x 10	ACH or CH-412	3	4.02
PC-1017	17 x 10	ACH or CH-415	3¼	4.9

Premier Cabinet Racks

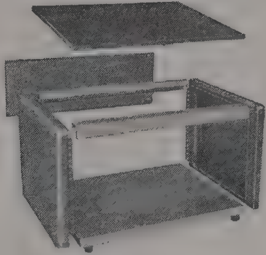


PREM-O-RAK

ARISTOCRAT OF CABINET RACKS

AVAILABLE IN 20 DIFFERENT SIZES—FROM 7" TO 35" PANEL SPACES

BOTH 15¼" AND 18" DEEP FOR STANDARD 19" PANELS



POR SERIES

PPED KNOCKED-DOWN WITH ALL NECESSARY HARD-
RE FOR EASY ASSEMBLY, STORAGE AND SHIPPING

th front and rear of top have attractive ball corners.

l screws for assembling PREM-O-RAK® are not visible from
e outside.

th front and rear verticals are tapped for 10-32 machine
rews on universal spacings so that panels may be mounted on
th front and rear if desired.

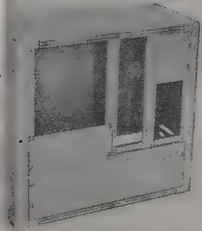
terlocking removable top made of perforated metal and held in
ace by only one captive screw.

terlocking removable rear panel made of perforated metal and
ld in place by two captive screws.

- Rigidly constructed of #16 gauge steel.
- Rear panel has 3½" opening on bottom for leads, etc.
- Panels fit into ½" recess.
- Base supplied with four rubber feet.
- Components may be mounted on base before assembly of rack into a complete unit.
- **HANDSOMELY FINISHED IN TWO-TONE HAMMERTONE.**
  Top cross braces and base are gray hammertone.
  Top and rear panel and side panels are brown hammertone.

ALL CABINETS ARE 21¾" WIDE

15¼" DEEP					18" DEEP		
emier No.	Net Each	Sh. Wt., Lbs.	Overall Height	Panel Space	Premier No.	Net Each	Sh. Wt., Lbs.
POR-7	$25.20	22	9⅜"	7"	POR-718	$27.88	24
POR-8	26.46	24	11⅛"	8¾"	POR-818	29.30	26
POR-10	30.24	26	12⅞"	10½"	POR-1018	33.39	29
POR-12	32.76	28	14⅝"	12¼"	POR-1218	36.07	31
POR-14	36.54	32	16⅜"	14"	POR-1418	40.32	35
POR-17	43.47	40	19⅞"	17½"	POR-1718	47.88	44
POR-21	47.25	44	23⅜"	21"	POR-2118	52.29	48
POR-26	51.03	45	28⅝"	26¼"	POR-2618	56.23	49
POR-31	53.55	50	33⅞"	31½"	POR-3118	59.69	55
POR-35	56.70	55	37⅜"	35"	POR-3518	62.53	60


MDK

MODU-RAK®

- Front vertical corners are rounded and the top and bottom are trimmed with red striped chrome molding.
- Rigidly constructed of No. 16 gauge cold rolled sheet steel.
- Panels fit into a recess so that the edges are not exposed.
- Panel mounting holes are tapped for 10-32 machine screws on Universal Spacings.
- 6 knock-out holes are provided on top and bottom of MDK-70 through MDK 280 series to accommodate angle brackets (Cat. No. AB-2).
  Two knock-out holes are provided on top and bottom of MDK-50-95 through MDK-120-95 series.
- Rear panel on Models MDK-70 through MDK-140 and MDK-70-95 through MDK-140-95 can be removed from back of cabinet for service.
- Rear doors have snap catches.
- Bolts are not visible from the outside and these units have the same appearance as the welded models.
- **FINISHED IN GRAY HAMMERTONE.**
- **SHIPPED KNOCKED-DOWN WITH ALL NECESSARY HARDWARE FOR EASY ASSEMBLY.**

MINIATURE DESK RACKS

12" DEEP FOR MODULAR CONSTRUCTION OF TEST EQUIPMENT

FOR STANDARD 19", 9½" AND 4¾" RACK PANELS

21¾" WIDE X 12" DEEP

Premier No.	Overall Height	Available Panel Space	Shpg. Wt., Lbs.	Net Each
MDK-50	7"	5¼" x 19"	16	$10.71
MDK-70	8¾"	7" x 19"	20	11.07
MDK-80	10½"	8¾" x 19"	21	11.76
MDK-100	12¼"	10½" x 19"	23	13.53
MDK-120	14"	12¼" x 19"	25	14.76
MDK-140	15¾"	14" x 19"	29	16.65
MDK-170	19¼"	17½" x 19"	36	20.22
MDK-210	22¾"	21" x 19"	39	22.05
MDK-260	28"	26¼" x 19"	40	24.12
MDK-280	29¾"	28" x 19"	41	26.01
12¼" WIDE X 12" DEEP				
MDK-50-95	7"	5¼" x 9½"	14	$10.26
MDK-70-95	8¾"	7" x 9½"	15	10.71
MDK-80-95	10½"	8¾" x 9½"	16	11.43
MDK-100-95	12¼"	10½" x 9½"	17	13.23
MDK-120-95	14"	12¼" x 9½"	18	14.37
MDK-140-95	15¾"	14" x 9½"	20	15.81

VERTICAL SIDE SUPPORTS

ical side supports are made of No. 12 gauge steel and punched
2 on Universal spacings. Side supports are 2⅝" wide. Finished
uminum enamel.

o. S-	To Fit Racks	Size, Inches H. x D.	Net Set of 4
1	FD & RMA-2742, FD & RMA-4219	42 x1½	$15.00
2	PR-42, PR-4224, PR-2742, PR-2742-24	42 x1¼	15.00
3	FD & RMA-4224	42 x2	15.00
1	FD & RMA-2761, FD & RMA-6119	61¼x1½	19.85
2	PR-61, 61-24, 2761, 2761-24, 3361, 3361-24	61¼x1¼	19.85
3	FD & RMA-6124	61¼x2	19.85
1	RMA-7618, 7030, FD-7019, FD & RMA-2770	70 x1½	23.10
2	PR-70, 70-24, 2770, 2770-24, 3370, 3370-24	70 x1¼	23.10
3	RMA-7019, FD-7024	70 x2	23.10
1	FD & RMA-7719, FD & RMA-2777	77 x1½	25.85
2	PR-77, 77-24, 2777, 2777-24, 3377, 3377-24	77 x1¼	25.85
3	FD & RMA-7724	77 x2	25.85

2-IN-1 STEEL AND ALUMINUM METER CASES

Center hole for 2" meter increases to 3" by simply removing a knock-out. Hole dia., 2⁵⁄₁₆" or 2¹³⁄₁₆". Size, 4⁵⁄₁₆" x 4½" x 4¼". Supplied with two ½" dia. knock-outs. No. 20 gauge steel, black wrinkle finish. No. 18 gauge (.040) aluminum natural aluminum finish. Shipping Weight, ¾ lb.

Premier No. SPC-23—Steel. Net Each	$1.26
Premier No. ASPC-23—Aluminum. Net Each	1.51

SHELVES

le of No. 16 gauge steel. Finished in aluminum enamel.

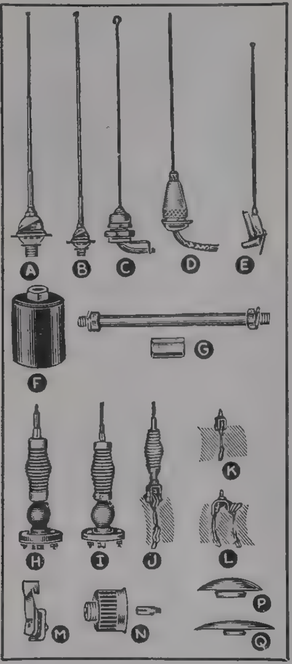
mier No.	To Fit Racks	Depth In.	Width In.	Net Each
1819	19" panels—18" deep	14¼	17½	$3.15
2419	19" panels—24" deep	20¼	17½	3.78
2424	24" panels—24" deep	20¼	22½	4.47
2430	30" panels—24" deep	20¼	28½	5.40

SIDE MOUNTING BRACKETS

Made of No. 12 gauge steel, finished in aluminum enamel.

Premier No.	To Fit Racks	Length	Net Per Pair
SMB-18	All 18" PR, FD & RMA Deep Racks	14"	$3.00
SMB-24	All 24" PR, FD & RMA Deep Racks	20"	3.90

Antenna Specialists Antennas



BUMPER MOUNTS

Antenna Specialists Model M-2A (Fig. K)—Single bumper mount uses Z-shaped links for easy adjustment to any bumper. Quick fastening with open-end wrench. Phenolic insulators and receptacle for spring or whip, ⅜"-24 thread. Cadmium plated alloy steel construction. Weight, 1 lb., 1 oz. Net Each..... $5.25

Antenna Specialists Model ASP-143 (Fig. L)—Same as above, but double chain links. For use with ASP-3A spring and/or ASP-3BL whip. Weight, 2 lbs., 1 oz. Net Each........................ $7.95

WHIP GUTTER CLIP (FIG. M)

Fastens to gutter of any car with single screw without drilling. Quick, temporary installation of any whip.
Antenna Specialists Model M-4—Net Each.................... 75c

DISGUISE ANTENNAS

For all installations where appearance or location of antenna must be like that of the ordinary car aerial. Top performance on emergency communications frequencies, 25-50 mc, 144-176 mc. Swivel base mounts on any surface with maximum 35° slant on cowl, fender o rear deck. Permanent joints withstand electrical currents. Easy installation; requires n supporting tube. Integral cable receptacle eliminates mechanical, electrical failures. Single hole mounting. Whip is 56" long.

Antenna Specialists Model ASPR80 (Fig. A)—Chrome plated whip, less cable and plug. Net Each.. $13.50

Antenna Specialists Model ASPR85 (Fig. B)—Stainless steel whip, 2-way; cowl mtg Net Each.. $13.50

ROOF-TOP ANTENNAS

Antenna Specialists Model ASP-1 (Fig. C)—Standard original equipment or replacement mounts easily from outside without soldering roof-top. For 144-176 and 450-470 mc bands. Mounts in ¾" hole with precision-made, water-tight mount with 4-point grounding Stainless steel whip with 12 ft. RG-58/U cable soldered to antenna and PL-259 connector with cable adapter. Weight, 12 oz. Net Each.................... $5.10

Antenna Specialists Model ASP-126 (Fig. D)—New miniature version mounts in ⅜" hole with exclusive toggle mount that insures positive grounding. Superior support design prevents pulling out; right angle support for cable prevents shorting. Stainless steel rod with 12 ft. RG-58/U cable soldered to antenna and PL-259 connector with cable adapter. Weight, 12 oz. Net Each.................... $5.10

AUTO GUTTER CLAMP ANTENNA (FIG. E)

Temporary mobile mounting for 108-176 and 450-470 mc bands. Snaps on to rain gutter o any car in seconds; removes easily. Complete with 12 ft. RG-58/U cable and PL-25 adapter. Whip cut to desired length for any frequency within the ranges listed—specify when ordering. Shipping Weight, 1 lb., 6 oz.
Antenna Specialists Model ASP-157—Specify frequency. Net Each............ $6.90

LOADING COILS (FIG. F)

Reduces the length of the antenna rod without changing mechanical inertia. Threaded ⅜"-24 to fit top of shock mounting spring and accept rods. Pre-tuned, non-adjustable. Retains strength, performance, mechanical flexibility and electrical performance of rod. Weatherproof coated. Shipping Weight, ½ lb.

Ant. Spec. Model No.	Type	Net Each
ASP-87	3-Turn	$8.43
ASPA-87	4-Turn	8.43
ASPB-87	5-Turn	8.43
ASPC-87	6-Turn	8.43

MAST EXTENSIONS AND COUPLINGS (FIG. G)

Extensions support load coils; fabricate of ⅜" O.D. material with ⅜"-24 mal thread; supplied with lock nut. Mode M-6 coupling supplied with each unit.

Lgth., In.	Steel Tubing Chrome Plated		Stainless Steel Polished Rod	
	Model	Net Ea.	Model	Net Ea.
6	M5-6	$2.25	M5S-6	$2.76
12	M5-12	2.91	M5S-12	3.50
18	M5-18	3.30	M5S-18	3.75
24	M5-24	3.69	M5S-24	4.50
30	M5-30	4.05	M5S-30	5.00
36	M5-36	4.55	M5S-36	5.25

Model M6 Coupling Nut—Net Ea... 75

BASE, SPRING AND WHIP ASSEMBLIES

Antenna Specialists Model G-1 (Fig. H)—Standard professional communication antenna includes ASP-3 base, ASP-3A spring and ASP-3BL whip. Weight, 5 lbs., 2 oz. Net Each.................... $18.81

Antenna Specialists Model G-2 (Fig. H)—All stainless steel version of above un includes ASP-81 base, ASP-70 spring, ASP-121 whip. Weight, 5 lbs., 2 oz. Net Each.................... $33.16

Antenna Specialists Model M-1 (Fig. I)—Standard amateur model includes M-3 base, M-3A spring and M-3B whip. Weight, 4 lbs., 7 oz. Net Each............ $8.97

Antenna Specialists Model M-2 (Fig. J)—Amateur bumper mounting unit includes M-2A mount, M-3A spring and M-3B whip. Weight, 4 lbs., 5 oz. Net Ea. $11.64

ADAPTERS, SWIVEL BASES AND BASE CONVERTER

Antenna Specialists Model ASP-160 Coaxial Adapter (Fig. N)—Permits use of PL-259 plug with ASP-3 mount without splitting cable. Net Each. $1.50

Antenna Specialists Model ASP-161 Coaxial Outside Self-Mount Adapter—For standard ASP-3 mounting on new double shell car bodies. Permits cable attachment before mounting Attaches with 6 metal screws. Includes ASP-160 coax adapter. Net Each. $3.60

Antenna Specialists Model ASP-162 Coaxial Right Angle Adapter—Same as ASP-161, but with right angle lead take off. Net Each.......... $4.65

Antenna Specialists Model M-13 Amateur Base—Swivel base with aluminum ball, coax lead connection. Net Each.................... $6.00

Antenna Specialists Model M-14 Amateur Base—Swivel base with coax lea connection and outside mounting. Net Each.................... $6.90

Antenna Specialists Model M-15 Converter—Converts amateur swivel base to coax connector. Net Each. $2.25

RUBBER HOLE PLUGS

Antenna Specialists Model M-11 (Fig. P)—Fits ¾" hole, covering 1½" for fillin removed roof top antenna. Net Each.................... 60

Antenna Specialists Model M-10 (Fig. Q)—Covers 3¾", fits 1⁵⁄₁₆" hole; fills removed base swivel holes. Net... 90

GROUND PLANE ANTENNAS AND ACCESSORIES

Antenna Specialists Model ASPA-11 (Illustrated)—24-50 mc. Non-directional; mounts on 1¼" pipe; will handle up to 3 kw. Vertically polarized; used for any emergency communications fixed station transmitter requirement. Weatherproof. Complete with vertical radiator, and ground radials made of removable tapered stainless steel rods. Flex with the wind and prevent formation of ice loads. Adapter not included. Shipping Weight, 8 lbs. Specify frequency when ordering. Net Each.................. $51.00

Antenna Specialists Model ASP-11 (Not Illus.)—Same as Model ASPA-11, but with vertical radiator and radials made of ¼" dia. cadmium plated steel rods and can be supplied for frequencies 120-176 mc—450-470 mc. Shipping Weight, 3 lbs. Specify frequency when ordering. Net Each.................... $16.50

Antenna Specialists Model ASPB-11 (Not Illus.)—Same as Model ASP-11 except radiator and radials are ⅜" dia. aluminum capable of supporting heavy ice loads. Shipping Weight, 3 lbs., 5 oz. Specify frequency when ordering. Net Each.................... $21.60

Antenna Specialists Model M-7 (Illus.)—Amateur non-directional, vertically polarized, fixed station antenna for 120-470 mc operation. Vertical radiator and radials made of stainless steel removable rods. Mounts on ⁵⁄₁₆" max. dia. pole. "U"-bolt hardware, ten-foot coaxial lead and connector supplied; additional lead length available. Shipping Weight, 1 lb. Net Each.................... $7.15

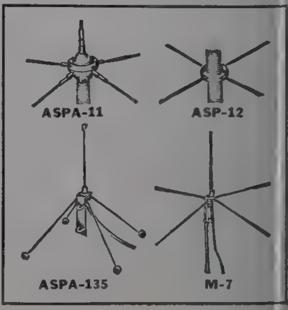
Antenna Specialists Model ASPA-135 (Illus.)—Vehicular portable ground plane antenna; 450-470 mc. For temporary or permanent mounting on standard auto antenna or other ⁵⁄₁₆" maximum dia. pole. Ends of radials covered by plastic balls. Supplied with "U" bolts and all necessary hardware. Twelve-foot RG-58/U coaxial cable and automotive pin-plug terminal supplied. Net Each...... $7.15

HUB

Antenna Specialists Model ASPD-11 (Not Illus.)—Hub only. For Model ASPA-11. Net Each........... $16.50

SKIRT

Antenna Specialists Model ASP-12 Skirt (Illus.)—Mounted ¼ wavelength below Model ASP-11 to modify vertical field pattern, lowering angle of radiation when properly spaced. Supporting ring fits antenna mast and is fastened in the desired position by set screws. Complete with ¼ dia. cadmium plated steel radials. Shipping Weight, 1 lb. Net Each. $5.85



Antenna Specialists Antennas

CITIZENS' BAND 11-METER ANTENNAS

PORTABLE RADIO AND TRANSCEIVER ANTENNAS

tenna Specialists Model ASP-58 (Fig. A)—Portable radio antenna rod. Whip and base nstructed of special analysis stainless steel. Length, 43″. Base fitting 10-32 readed internally for adaptation to mounting and loading coils. Wt., 5 oz. Net $6.90

tenna Specialists Model ASP-172 (Fig. A)—Base loading coil for use on ASP-58 an- nna whip. Adjusted for maximum output. Supplied with PL-259 connector for con- ction to SO-239 receptacle on top of transceiver. Stud at top threaded 10-32. hip not included. Net Each.......... $9.50

tenna Specialists Model ASP-63 (Fig. B)—Portable base-loaded whip antenna for use radios and transceivers. Vinyl covered loading coil wound into rod reduces length th no loss of performance, strength or flexibility. Length, 40″. Complete with -259 connector. Weight, 1 lb., 4 oz. Net Each.......... $7.77

tenna Specialists Model ASP-191 (Fig. C)—Side cowl mounting. Four sections, total gth 100″. Triple chrome plated metal; anti-rattle tube construction. Six- t coax cable included. Weight, 1 lb., 3 oz. Net Each.......... $11.25

tenna Specialists Model ASP-185 (Fig. D)—Auto gutter clamp antenna; snaps on to n gutter easily. Vinyl covered loading coil is an integral part of whip. Complete with RG-58/U cable and PL-259 adapter. Length, 40″. Weight, 1 lb., 6 oz. t Each.......... $15.40

tenna Specialists Model M-20 (Fig. E)—Window mast with mounting bracket. Tele- oping 96″ chrome plated brass tube assembly with 90° mounting adjustment. Mounts window sill or vertical surface. Lead not supplied. Weight, 1 lb., 9 oz. t Each.......... $7.50

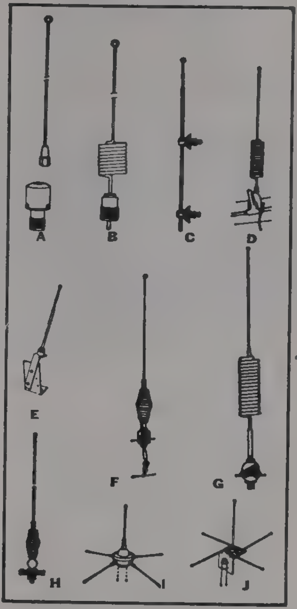
tenna Specialists Model M-21 (Not Illus.)—House mast with chimney mounting. lescoping 12′ plated brass tube assembly with galvanized chimney mounting brackets d straps. Built-in lightning arrester. Complete with 60′ of cable. Weight, 4 lbs. t Each.......... $7.80

tenna Specialists Model M-24 (Fig. F)—Rear bumper mounting antenna for instal- ion on car bumper with links on mount. Stainless steel whip 102″ long. Supplied with RG-58/U cable, PL-259 connector on one end and solder lugs on the other, l whip gutter clip. Weight, 5 lbs., 10 oz. Net Each.......... $17.60

tenna Specialists Model ASP-189 (Fig. G)—Front cowl mounting antenna with vinyl ered loading coil as an integral part of antenna. Fits into patented rocker support; y be mounted from outside of car in holes from ⅞″ to 1″. With 6′ RG-58/U le and PL-259 connectors both ends. Weight, 1 lb., 7 oz. Net Each.......... $15.75

tenna Specialists Model M-23 (Fig. H)—Mobile, rear mounting antenna, 102″ long. inless steel whip; plated shock mounting spring; aluminum swivel-base with coax apter; 15′ RG-58/U cable with PL-259 connectors supplied both ends. Gut- clip included. Weight, 5 lbs., 7 oz. Net Each.......... $18.90

tenna Specialists Model ASP-186 (Fig. H)—Rear mounting antenna of high quality inless steel 102″ whip, plated shock spring, painted and plated aluminum swivel-base. pplied with 15′ coax, PL-259 connectors on both ends. Weight, 5 lbs., 15 oz. t Each.......... $26.75



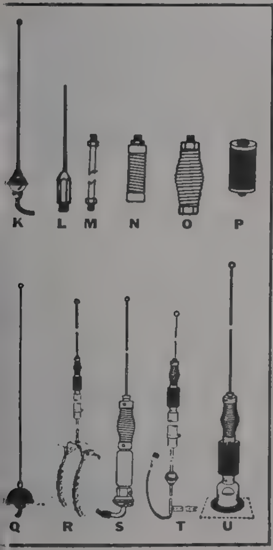
GROUND PLANE ANTENNAS

tenna Specialists Model M-12 (Fig. I) Non-directional antenna handles up to kw. Vertical radiator and radials are novable stainless steel rods. Weather- oof assembly. Base accepts PL-259 con- tors. Fits 1¼″ IPS pipe. Weight, 9 ., 6 oz. t Each.......... $42.21

Antenna Specialists Model M-22 (Fig. J)—Vertical radiator and radials are telescoping chrome plated brass tubing. Removable from cadmium plated steel mounting bracket. Fits 1″ IPS pipe. Antenna base accepts PL-259 connectors. Hardware furnished. Weight, 3½ lbs. Net Each.......... $15.95

Antenna Specialists Model M-27 (Fig. J)—Similar in design and appearance to Model M-22 but vertical radiator and radials are constructed of 108″ solid tapered stainless steel for extra durability and dependability. Net Ea. $28.50

MOBILE ANTENNAS AND ACCESSORIES



MOBILE ANTENNAS AND COIL

Antenna Specialists Model M-85 (Fig. K)—Mobile 6-meter antenna for mounting on cowling; with 59″ flexible stainless steel whip. Neat appearance for working the 6-meter band. Gutter clip and 54″ lead included. Net Each.......... $8.97

Antenna Specialists Model M-3B (Fig. L)—Stainless steel 60″ whip with removable adapter. Antenna may be cut to desired length. Net Each.......... $4.35

Antenna Specialists Model M-19 (Fig. P)—Automatic coil for 10, 15, 20-meters. No adjustment necessary when bandswitching. Compact and weatherproof. Net Each.......... $14.95

SHOCK SPRINGS, EXTENSION

Antenna Specialists Model M-25 (Fig. N)—Mini-spring, reduces shock to coil; prevents damage to it if whip should strike another object. Net Each.. $1.98

Antenna Specialists Model M-9A (Fig. O)—Heavy duty spring, cadmium plated metal. Net Each.......... $4.77

Antenna Specialists Model M-8A (Not Illus.)—Heavy duty standard spring. Net Each.......... $3.65

Antenna Specialists Model M-9AS (Not Illus.)—Deluxe, polished stainless steel heavy duty spring. Net Each $8.95

Antenna Specialists Model M5-36 (Fig. M)—Chrome-plated solid mast extension with coupling nut. Available in six lengths and in either solid chrome or stainless steel. Net Each, 36″ length... $4.55

ROOF-TOP ANTENNA

Antenna Specialists Model ASP-201 (Fig. Q)—Antenna is ¼-wave length, mounts in ⅜″ hole. Snap-in split-finger mounting sleeve. Solderless lead connection at antenna. Net Each.......... $2.85

Antenna Specialists Model ASP-201L (Fig. Q)—Same as Model ASP-201 except includes 12′ of RG-58/U cable and PL-259 connector. Net Each..... $4.95

NEW HIGH GAIN MODELS

FOR 130-174 MC

Antenna Specialists Model ASP-200 (Fig. R)—Bumper-mounting ½-wave antenna with permanently attached lead. Incorporates all the features of the ASP-177, including a tunable sleeve. Complete with 12′ RG-58/U cable and PL-259 connector. Net Each.......... $36.00

Antenna Specialists Model ASP-177 (Fig. S)—Doubles transmitting power with 3 db gain; receiver becomes 1.56 times more sensitive (4 db) increasing range. Weather tight mounting fits in ¾″ rooftop hole. With 12′ RG-58/U cable and PL-259 connector. Net Each... $24.00

Antenna Specialists Model ASP-197 (Fig. T)—Tunable sleeve for peaking adjustment, otherwise, same as ASP-177. Mounts in ⅞″ hole for ½-wave length. Includes 12′ RG-58/U cable with PL-259 connector. Net Each.......... $30.00

Antenna Specialists Model ASP-203 (Fig. U)—Conversion kit to convert roof-top antenna to high gain. Converts: G.E., RCA, and ASP-201 (⅜″ hole) to ½-wave length. Net Each... $19.50

Antenna Specialists Model ASP-206 (Fig. U)—Same as ASP-203 except converts Motorola antenna to ½-wave length, high gain. Net Each.... $19.50

Master Mobile Antennas, Coils, Mounts

CITIZEN'S BAND

3 ELEMENT 11-METER BEAM

Greater strength and performance in the 11-meter band; designed for powers up to 1K watts input. Boom, 1½" dia.; elements, ¾"; telescoping sections are drawn aluminum tubing. Plated steel channels support elements. Furnished with 3' mast section for attaching to rotator. VSWR, 1:1 with 52-ohm coax. Forward gain (power increase 2½ times), 8 db; attenuation, 20 db front to back ratio. Weight, 11¾ lbs. **No. SR-500**—Net Each $36.00

MARINE ANTENNAS AND MOUNTS

Provides maximum power on all frequencies from 2 to 3 mc. Overall length, 10½'. Plastic coated stainless steel whip; 18" center-loaded coil; 5' base section. Safe from damage by electrolysis. Has rugged insulators, adjustable antenna lead. Whip and coil colors: Yellow, blue or black. Base colors: Gold (salt-water anodized).

No. MMM-2710—Antenna and solid mounts. 5' base. Net Each. $29.95

No. MMM-2715—Same as above with 10' base. Net Each. $35.95

No. MMM-2700—Antenna, 5' base; less mounts. Net Each. . . . $27.95

No. MMM-2705—Antenna, 10' base; less mounts. Net Each. . . . $33.95

No. MMM-10—Solid mounts for easy mounting. Net Each. $5.00

MASTER SUPER MARINE ANTENNA

Antenna is 12' anodized 1¾" tubing. Coils section, 35" long; 8' fiberglas whip.

No. MMM-2750—With mounts. Net Each. $49.95

No. MMM-2750—Less mounts. Net Each. $47.95

No. MMM-25—Master Deluxe Laydown Mount. Mount on side of cabin or on deck; adjustable. Chrome-plated brass, phenolic insulated. Net Each. $19.95

FIBERGLAS BASE SECTIONS

Moisture resistant fiberglas base section eliminates distortion of radiation pattern of vertically-polarized VHF and UHF antennas caused by metal support tubes. Masts available in 4', 5', or 6' spiral wound fiberglass sections. Size: 1⅛" O.D.

No. FG-14—Length, 4'. Net Ea. $ 8.95
No. FG-15—Length, 5'. Net Ea. 9.95
No. FG-16—Length, 6'. Net Ea. 10.95
No. PL-259—Coax plug with antenna. Net Each. $6.95

No. PL-259 Plug—With 10' length of RG8/U coax. Net Each. $8.95

No. PL-259 Plug—With 10' length of RG58/U coax. Standard auto radio plug also available (specify). Net. $3.25

NEW ULTRA-HI "Q" COILS

Tried and tested to a "Q" of well over 515; highest sensitivity ever for mobile coils. Deliver more QSO's and greater DX. More than 10 outstanding features; extra rugged, compact, yet lightweight. Size: 2½" dia., all ranges; 8" long, 75 (and 80) meter unit; 5" long, 40 meter unit; 3" long, 20 and 15 meter units.

ULTRA-HI "Q"			C.A.P.*		
UHQ-No.	Freq. Meters	Net Each	UHQ-No.	Freq. KC	Net Each
75	75, 80	$5.25	2374	2374	$8.95
40	40	5.25	2738	2738	8.95
20	20	5.25	2768	2768	8.95
15	15	5.25	4507.5	4507.5	7.95
......	....	.....	4585	4585	7.95
......	....	.....	4325	4325	7.95
......	....	.....	2251	2251	12.95
......	....	.....	160	160†	12.95

*Additional Hy "Q" C.A.P. Coils for use with C.A.P. Antennas available. Coils are interchangeable. †Meters.

E-Z-OFF ANTENNA CONNECTOR

Positive lock, noise-free connector. No wrenches, pliers or screwdrivers needed to connect or remove loading coils. Will not corrode.
No. 295—Net Each. $2.95

NEW MULTI-BAND COILS

No. 999—High "Q" unit is tapped for 10, 15 and 20-meter operation. Net Each. $14.95

No. 900—Versatile, high "Q" coil tapped for 10, 15, 20, 40 and two taps for 75-meter operation. Net Each. $14.95

"SLIM-JIM" ALL-BAND COIL

All-band, base-loading coil with whip section adjustable for any band. Whip telescopes into the coil.
No. B-1080 Coil—Net Each. . . . $17.95

MIGHTY-MIDGET ANTENNA COIL

Non-linear, "variably-spaced", engineered to provide highest "Q" consistent with good design. Compact, extremely rugged, lightweight. New silver-plated roller stays put. Perfect for 40-20-15-11-10 meters.
No. 333 Coil—
Net Each. $9.95

THE NEW MASTER-MATCHER

Motor-driven variable reluctance controlled from driver's seat. Built-in field strength meter. Covers 75 and 40 meter bands. Automatic light when roller is at minimum inductance position. Coil in heavy aluminum box. **No. 2495-6** (6-volt) or **2495-12** (12-volt). Either. Net $24.95

MASTER-FLEX-'R

New heavy duty Master-Flex-'r relieves the shock of the whip on all loading coils. Protects the whip and loading coil from injury and detuning while driving at high speed, or from overhanging limbs, or when driving into the garage. Spring steel, cadmium finish. Easy to attach. Size: 4½" long x ⅞" dia. Takes ⅜"-24 thread.
Master-Flex-'r—Net Each. $1.95

MICRO-Z-MATCH

Micrometer impedance matching inductance for mobile antennas. Used on all bands with any type coax cable. Roller coil construction with rear cap rotating inductance within case. 4 mh max. inductance. With coax adapter.
No. 825 Micro-Z-Match—Net Ea. $7.95

HEAVY-DUTY BUMPER MOUNTS

Tapped for ⅜"stud fitting on antenna end. Shipping weights, 3 lbs. Number Code: X—Heavy Duty; XX—Extra Heavy Duty; SS—Special Stainless; XC—Heavy Duty Coax; XSS—Heavy Duty Stainless; XSSC—Heavy Duty Special Stainless Coax.

No.	Description	Net
140 140X	Double Tapered Spring	$ 6.95 7.95
140SS 140XSS	Special Stainless	9.65 10.95
140XX 140XXSS	Double Tapered Sp. Extra Heavy Duty	8.95 11.95
142	Less Spring, with insulators#	3.95
446SS 446XSS 446XXSS 446	Chain Mount	14.90 15.90 16.90 13.45
446L 446XX	Dbl. Tapered Spr.; Chain Mount	12.45 14.45
444	Swvl. Bs., Chain Mt.	17.80
444L 444SS	Dbl. Tapered Spr., Swvl. Bs., Chain Mt.	16.70 20.90
444XX 444XSS 444XXSS	Swvl. Bs., Chain Mt.	18.80 22.90 23.90
445	Threaded ⅜"-24; Chain Mount	7.95

#For direct mounting by Series 100 Antenna or by 92 Extension and 106 Antenna.

No. 118 Coax Adapter Kit—For No. 232 mounts. Net Each. $1.00

MOUNTING ACCESSORIES

NEW MASTER "TENNAHOLD"

Attaches to rain molding (above door) of car. Holds tip of antenna down; away from low limbs, garage doors, etc. Hard cadmium finish.
No. 10H "Tennahold"—Net Each $1.00

BODY MOUNTS

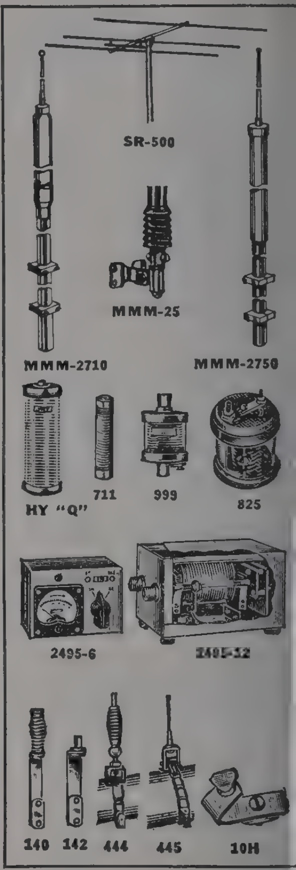
No. MMW-3AE—Latest design in universal swivel base. Positive ball-locking with allen-head bolt. Steel, phenolic and two neoprene washers for watertight mounting without special tools through ⅜-24 hole. Ebony finish.
Net Each. $6.95

No. MMW-3AES—As above with stainless steel hardware. Net Each. $8.95

No. MMW-3AP—Same, but high gloss polish finish. Net Each. $7.95

No. MMW-3APS—Polish finish with stainless steel hardware. Net Each. $9.25

390X-59A



No. 232—Double tapered spring bod mount with swivel base. Net Each. $8.75

No. 232C—Double tapered spring bod mount with swivel base coax connector. Net Each. $8.75

No. 232SS—Special stainless double t pered spring body mount. Net Each. $12.95

No. 232SSC—Special stainless double t pered spring body mount with coax connector. Net Each. $12.95

No. 321—Special rigid ball joint construction. Net Each. $7.95

No. 132-J—Double tapered body mou with spring swivel base, small size. Net Each. $4.17

No. 132-JC—With Coax Connector $5.17

No. 140-J—Same as No. 140 but smaller. Net Each. $4.17

SEPARATE BODY MOUNT SPRINGS

No. MMW-7—Tapered, heavy-duty wi cadmium plated center conductor. Tapp ⅜-24 hole for mast; ⅜-24 stud for bas 5" high. Black painted end plates. Net Each. $4.50

No. MMW-7HC—Heavy cadmium plat for long life. Net Each. $5.50

No. MMW-7SS—Stainless steel spri and mounts. Net Each. $8.95

No. 100—Regular. Net Each. 4.50
No. 100-X—Heavy Duty. Net. . . . 5.50
No. 100SS—Stainless Steel. Net. . 6.95
No. 100XSS—Hvy. Duty Stn. Stl. 7.95
100WX—Male stud on 1 end. Net. 5.50
100XX—Extra Hvy. Duty. Net. . 6.50
100WXX—XtraHvy.Dty;Ml.Std. 6.50
100XXSS—Ex. Hvy. Dty. Stn. Stl. 8.95

hallicrafters RADIO

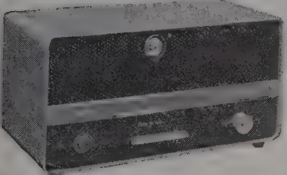
NEW SR-34 TRANSCEIVER

APPROVED FOR F. C. D. A. MATCHING FUNDS

SR-34 (AC-DC) $495.00
SR-34 (AC only) $395.00

Complete 6-meter (48.8-54.2 mc) and 2-meter (143.5-148.5 mc) station with all functions of both receiver and transmitter for AM or CW operation. Built-in power supply for fixed (115 v. AC) or mobile (6 or 12 v. DC transistorized) operation; instantaneous voltage selection. Convenient cross-banding facility. **Receiver:** Double conversion, super-het with quartz crystal-controlled second oscillator; separate RF and oscillator on each band for best efficiency; oscillators are voltage regulated. Features S-Meter and ANL. CONTROLS: Band Selector; Main Tuning; Sensitivity; Audio Volume; BFO Pitch; Squelch level; Function (P.A. filament, receiver filaments, receiver and transmitter filaments and crystal spotting, AM and CW); Power Switch and Headphone Jack (disables internal speaker). **Transmitter:** Crystal controlled; uses up to four crystals, switch selected (from front panel) with a fifth position for external VFO. Hinged door in front panel hides tuning controls; cover has mounting clips for antenna, owner's mike and cords. Collapsible whip antenna tuned to 6 meters extended, 2 meters half-extended. CONTROLS: Band switch; Crystal Selector; Oscillator Tuning; Doubler Tuning; Tripler Tuning; Final Tuning; Final Loading; Meter Switch; Tuning 1 to 4; S-Meter. REAR PANEL: Speech input level, key jack; PA speaker terminals; relay terminals; mike selector for high-Z or carbon; mike input; AC and DC fuses; power socket. **Power Output:** 6-7½ watts on 2 meters; 7-10 watts on 6 meters. **Antenna Output:** 52 ohms resistive. **Size:** 14⅞″ w. x 13⅝″ d. x 8½″ h. Shipping Weight, 33 lbs.

NEW CB-1 CITIZENS' BAND TRANSCEIVER



COMPLETE
$139.95

LESS ANTENNA
$129.95

High performance two-way Citizen Band radio-telephone station exceeds F.C.C. specifications for Class D service. Assures maximum talk-power by full 100% modulation with magic eye indicator. Transmitter section is separately shielded and has special built-in low pass filter to eliminate TVI. RF filters are provided on the power line. Receiver section has RF stage, crystal controlled oscillator, 2 IF stages, series noise limiter and adjustable squelch. Features powerful 2-watt audio amplifier to drive built-in speaker. Headphone/speaker switch provides privacy when desired. Rugged, reliable bar-type, press-to-talk switch for extra convenience. Comes complete with plug-in, high gain ceramic microphone and two precision quartz crystals installed for Channel 11. **Tubes:** 9, plus rectifier and magic eye. For 117 v. AC, (65 watts) operation. Gray steel cabinet has silver trim. **Size:** 13½″ w. x 8¼″ d. x 6½″ h. Shipping Weight, 17 lbs.

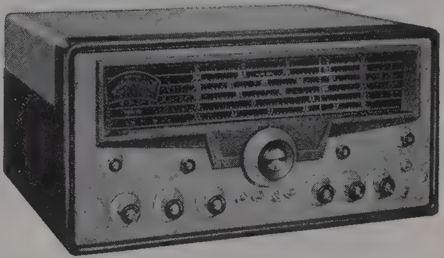
R-47 SPEAKER
$12.95

Specially designed for superior SSB and other voice applications. Perfect match for SX-99, SX-100 and SX-101A receivers. Response is essentially flat from 300 to 2,850 cps, then drops off rapidly beyond the cutoff points. Input impedance is 3.2 ohms. Compact, attractive styling; ideal for mobile installations. **Size:** 5½″ x 5¼″ x 3½″. Shipping Weight, 2½ lbs.

SX-101A RECEIVER

The receiver designed especially with the ham in mind. Each feature carefully planned to provide every essential needed—not only today but for operation in the future as well.

APPROVED FOR F.C.D.A. MATCHING FUNDS



SX-101A $399.50

Nominal Frequency Coverage (7 Bands): 3.5-4.1 mc; 7.0-7.3 mc; 14.0-14.4 mc; 21.0-21.5; 26.95-27.35 and 28.0-29.7 mc; 10 mc WWV. 30 to 35 mc for 2 or 6 meter converter input. Second conversion oscillators quartz crystal controlled. Full gear drive from tuning knob to gang condensers. 40:1 tuning knob ratio. Built-in precision 100 kc marker crystal. Five selectivity steps: 500-5,000 cps. Precision temperature compensation; production heat cycling for low drift. Individually illuminated band-in-use scales. S-Meter "0" point independent of sensitivity control; meter functions with AVC off. Direct coupled series noise limiter. **Sensitivity:** 1 μv or less on all bands. **Input:** 52 ohms; antenna trimmer. **Tubes:** 13; voltage regulator; rectifier; powerline fuse. **Controls:** Tuning (with 0-100 logging dial); Pointer Reset; Antenna Trimmer; T-Notch Frequency and Depth; Sensitivity; Band Selector; Selectivity; Pitch (BFO); Response (upper/lower sideband and tone); Volume/AC On-Off; AVC On-Off; BFO On-Off; ANL On-Off; Marker On-Off; Rec./Standby. Chassis of .089 cold rolled steel; relay rack panel. **Overall Size:** 20″ w. x 16″ d. x 10½″ h. **Panel:** 8¾″ x 19″. Weight, 74 lbs.

SX-62A RECEIVER

FOR ALL-WAVE RECEPTION
AM/FM/CW 550 KC TO 109 MC

SX-62A $375.00

World's finest receiver for the all-wave listener. Continuous coverage from 550 kc through to 109 mc in six bands. Provides communications-receiver performance in simplified form. Only one band lights up at a time. Crystal calibrator is built in to enable accuracy check of dial pointer at any time. Two RF stages, three IF stages to bring in even the weakest stations. Temperature compensated, voltage regulated to prevent fading caused by frequency "drift". **Controls:** Band Selector (550-1620 kc, 1.62-4.9 mc, 4.9-15 mc, 15-32 mc, 27-56 mc, 54-109 mc); Receive/Standby; Calibration Oscillator On-Off; Noise Limiter; Tuning; AF Gain; Phono/FM/AM/CW; Six-position Selectivity; Four-position Tone; RF Gain; Calibration Reset. Selectivity control has crystal filter. High fidelity audio with 10-watt push-pull output. External connections include terminals for doublet or single wire antenna, 3.2/8/500 ohm audio outputs, phone jack, external power, and remote control. Bands 1, 2, 3 and 4 are AM/CW; bands 5 and 6 are AM/FM/CW. Phono jack for playing records. **Tubes:** 14, plus one rectifier and one voltage regulator. For 105/125 v. AC. 50/60 cps operation. Satin black steel cabinet with light gray and chrome trim. **Size:** 20″ w. x 16″ d. x 10½″ h. Shipping Weight, 64 lbs. Speaker not included.

NEW HT-33A LINEAR KILOWATT AMPLIFIER

APPROVED FOR F.C.D.A. MATCHING FUNDS

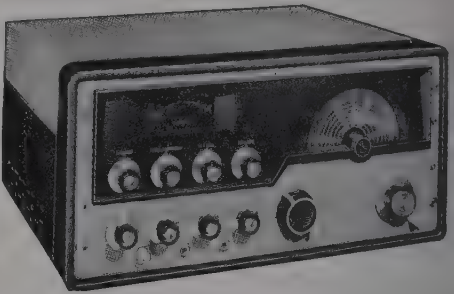
HT-33A $795.00

- **FULL METERING OF ALL IMPORTANT CIRCUITS**
- **RF OUTPUT METER FOR SIMPLE TUNE-UP**
- **BUILT-IN POWER SUPPLY**
- **COVERS ALL AMATEUR BANDS**
- **MAXIMUM LEGAL LIMIT INPUT**

Provides more output to the antenna than any other amateur linear amplifier on the market. Carefully engineered, with extra heavy-duty components, this amplifier is conservatively rated at the maximum legal limit, guaranteeing one of the big signals on the band with effortless operation. Ultra-compact design employs a single PL-172 pentode with 1000-watt plate dissipation. Self-contained power supply uses two 3B28 tubes connected in a full wave rectifier circuit possessing exceptional regulation. Screen voltage is controlled by four OB2 regulator tubes. Variable bias supply with front panel control included to maintain proper idling plate current. Provision has been made to apply cutoff bias by proper connections to an octal plug on the rear of the chassis. Five ampere fuse supplies overload protection for filament, bias and blower circuits; also includes a 1/16 ampere fuse to protect the PL-172 screen. A 20 ampere circuit breaker guards the high voltage supply; also acts as the high voltage on-off. **Input:** Maximum legal limit. **Distortion:** −30 db, third and fifth order products. **Input Impedance:** 50 to 75 ohms into passive grid. **Coverage:** All amateur bands, 80 through 10 meters. **Harmonic Suppression:** Pi-network for maximum suppression. **Output Loading:** Variable. **Controls:** Filament On-Off Switch; High Voltage On-Off; Meter Switch (grid, screen or cathode current, RF output and plate voltage); Band Selector; Plate Tuning 0-10; Plate Loading 0-10. Rear connections include Coax Input; Coax Output; AC Line Cord; Fuses; Octal Socket (for bias cutoff relay and AC control circuits); Grounding Bolt and Lug. **Tubes:** 1-PL-172; 2-3B28, 4-OB2. **Size:** 20″ w. x 17″ d. x 10½″ h. Shipping Weight, 130 lbs.

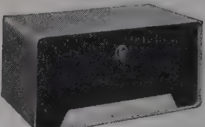
HT-32A TRANSMITTER

APPROVED FOR F.C.D.A. MATCHING FUNDS



HT-32A $695.00

A complete table-top, high efficiency amateur band transmitter providing SSB, AM or CW output on 80, 40, 20, 15 and 10 meter bands. **Two New, Exclusive Features:** High frequency crystal filter which cuts unwanted sideband 50 db or more; and, newly developed bridged-tee modulator that is extremely stable. These improvements make the HT-32A the first transmitter to develop an almost perfect side band modulator. **Other Features:** CTO direct reading in kilocycles to less than 300 cps from reference point; 144 watts plate input (P.E.P. two-tone). Provides all modes of transmission: CW, AM, and SSB. Unwanted sideband and carrier suppression down 50 db or more. Distortion products down 30 db or more. Keying circuit for RTTY. Separate phone patch input. Built-in push-to-talk. Precision gear-driven C.T.O. Exclusive, patented sideband selection. Pi-network output 52 ohms for harmonic suppression. Logarithmic meter for accurate tuning and carrier level adjustment. Full voice control system built-in. CW keying exceptionally clean. Rugged, heavy-duty deluxe construction thoughout. **Controls:** Operation—power off, standby, Mox, Cal, and Vox; Function—Upper sideband, lower sideband, DSB and CW; Audio Level 0-10; RF Level 0-10; Calibration Level 0-10; Driver tuning 0-5; Final Tuning—by hand calibration; Band Selector; and high stability, gear-driven VFO with dial drag control. **Input and Output Connections:** Mike connector, Key jack, and Headphone Monitor jack on front of chassis. Coax antenna connector, Line fuse, Control connector, AC power line cord, FSK jack, and AC accessory outlet on rear of chassis. **Tubes:** 2-6146, 6CB6, 12BY7, 4-6AH6, 6AB4, 2-12AX7, 2-12AU7, 2-12AT7, 6AL5, 6AU6, 5R4GY, 5V4G and OA2. **Size:** 20″ w. x 17″ d. x 10½″ h. Shipping Weight, 86 lbs.



R-48 SPEAKER
$19.95

Latest design uses new 5½″ x 7½″ elliptical assembly. Alnico V 3.16 oz. magnet has fully saturated air gap for exceptional damping, distortion-free response. Switch at rear for selection of music or voice response. Use with SX-101A, SX-100, SX-110, SX-62A, or any receiver with 3.2 ohm output. Gray steel cabinet. **Size:** 13¼″ w. x 8¼″ d. x 6⅝″ h.

SX-100 SELECTABLE SIDE BAND RECEIVER

APPROVED FOR F.C.D.A. MATCHING FUNDS

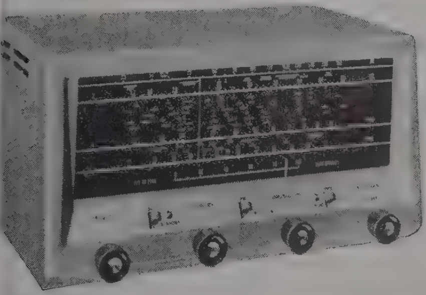
SX-100 $295.00

Features: Selectable side band operation. Tee-Notch Filter providing a stable non-regenerative system for rejecting unwanted heterodyne; also produces an effective steepening of the already excellent 50 kc IF pass band and further increases the effectiveness of the advanced exalted carrier AM reception. Notch Depth control for maximum null adjustment. Antenna trimmer. Plug-in laboratory-type evacuated 100 kc quartz crystal calibrator. Logging dials for both tuning controls. Full precision gear drive dial system. Second conversion oscillator is crystal controlled for greater stability and additional temperature compensation of high frequency oscillator circuits. **Audio Power Output:** 1.5 watts with 10% or less distortion. **Front Panel Controls:** Pitch, Reception, Standby, Response (Upper and Lower Side Band Selector), Antenna Trimmer, Notch Frequency, Notch Depth, Calibrator On-Off, Sensitivity, Band Selector, Volume, Tuning, AVC On-Off, Noise Limiter On-Off, Bandspread, Selectivity. **Tubes and Functions:** 1-6CB6 R.F. Amplifier, 1-6AU6 1st Converter, 1-6C4 H.F. Oscillator, 1-6BA6 1650 kc I.F. Amplifier, 1-6BA6 2nd Converter, 1-12AT7 2nd Conversion Crystal Oscillator, 1-6C4 50 kc Amplifier, 1-6BA6 50 kc I.F. Amplifier, 1-6BJ7 Det.-A.V.C.-A.N.L, 1-6SC7 Audio Amplifier and B.F.O., 1-6K6GT Audio Output, 1-OA2 Voltage Regulator, 1-5Y3GT Rectifier, 1-6AU6 Crystal Calibrator. **Coverage:** Standard Broadcast 538-1580 kc; 3 Short Wave—1720 kc-4.9 mc; 4.6-13 mc and 12-34 mc Bands. **Selectivity:** 5 steps—1. (Broad) 6 db-5 kc 60 db-15 kc; 2. (Broad) 6 db-3 kc 60 db-12 kc. 3. (Broad) 6 db-2 kc 60 db-10 kc; 4. (Broad) 6 db-1.3 kc 60 db-7 kc; 5. (Sharp) 6 db-0.5 kc 60 db-5 kc. **External Connections:** 3.2/500 ohm speaker terminals; Single or double wire antenna terminals; Phono jack; AC power cord; Socket for DC operation and remote control; Audio output terminals; "S" meter electrical adjustment and mounting hole for coax cable connector; Phone jack on front panel. **Power Consumption:** 105-125 volts, 50/60 cycle AC. **Size:** 8½″ x 18⅜″ x 10⅝″. Shipping Weight, 43 lbs.

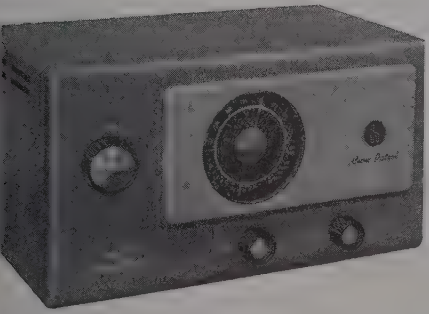
hallicrafters RADIO

-108

-107



-38E



-94, S-95

SX-110

NEW MODEL SX-110 RECEIVER

Covers broadcast band, 540-1600 kc, plus three short-wave bands, 1550 kc to 34 mc, with slide rule dial calibrated, electrical bandspread over the 10, 15, 20, 40 and 80 meter amateur bands. Delivers 2 watts audio power output. Features separate bandspread tuning condenser, crystal filter, antenna trimmer, and "S" meter; has one RF and two IF stages. Controls include: Antenna Tuning; Sensitivity; Band Selector; BFO Pitch; Main Tuning; Bandspread Tuning; Volume; On-Off-Tone; Standby; AM/CW Switch; Selectivity; Crystal Phasing; Noise Limiter; Headphone Jack. Terminals provided for doublet or single-wire antenna, plus terminals for 3.2 and 500-ohm speakers (use Model R-47 or R-48). **Tubes:** 7, plus rectifier. For 105/125 v. AC, 50/60 cps. Gray steel cabinet has brushed chrome trim. **Size:** 18¾" w. x 8" h. x 10¼" d. Shipping Weight, 32 lbs.

Model SX-110 Receiver—Net Each................ $\$159^{95}$

NEW MODEL S-108 RECEIVER

Top quality, medium priced receiver covers standard broadcast band, 540-1600 kc, and three short-wave bands, 1550 kc to 34 mc. Features slide rule bandspread dial calibrated on 10, 15, 20, 40 and 80 meter amateur bands; one RF, two IF stages; separate bandspread tuning condenser; temperature compensated oscillator. Has built-in speaker for extra convenience. Controls include: Sensitivity; Band Selector; Tuning; Bandspread; Volume; AVC; Noise Limiter; AM/CW; On-Off-Tone; Pitch Control; Standby/Receive. Terminals provide for single wire or doublet antenna; external antenna provided; headphone jack supplied on front panel. **Tubes:** 7, plus rectifier. For 105/125 v. AC, 50/60 cps. Gray steel cabinet has brushed chrome trim. **Size:** 18¾" w. x 8" h. x 10¼" d. Shipping Weight, 32 lbs.

Model S-108 Receiver—Net Each................ $\$129^{95}$

NEW MODEL S-107 RECEIVER

Unquestionably the finest small communications receiver built. Several steps better than the S-38E, but not quite up to the larger S-85. Covers 540-1630 kc and 2.5-31 mc and 48-54.5 mc in five bands. Two IF stages. Has separate sensitivity and volume controls; separate electrical bandspread tuning with calibration for 48-54.5 Mc band; Noise limiter, Rec./Standby, BFO, High-low tone, and Speaker/Phones switches. Built-in PM speaker. Temperature compensated to reduce drift. Phono input jack. **Tubes:** 7, plus one rectifier. For 105/125 v. AC, 50/60 cps operation. **Size:** 13¼" w. x 6¾" h. x 8¼" d. Shpg. Wt., 19 lbs.

Model S-107 Receiver—Net Each.................. $\$94^{95}$

MODEL S-38E RECEIVER

The radio that amazes even the experts! Pulls in broadcast stations in weak signal areas where ordinary sets fail. Also offers world-wide reception for the short-wave listener and the new radio amateur. Has regular communications-type controls for greater flexibility of operation. Covers Broadcast Band and three short-wave bands 540 kc to 32 Mc.

Maximum sensitivity and selectivity from expertly engineered chassis—far superior to ordinary radios having same number of tubes. Separate Fine Tuning control to separate stations on crowded short-wave bands. Built-in PM speaker. Oscillates for reception of code signals. **Tubes:** 4, plus one rectifier. 105/125 v., 50/60 cps, AC-DC operation; 220 v. AC-DC operation possible with line cord 87D1566. **Size:** 12⅞" w. x 7" h. x 9¼" d. Shipping Weight, 14 lbs

Model S-38E Receiver—Gray cabinet. Net Each...... $\$59^{95}$

Model S-38EB (Blond) or S-38EM (Mahogany) Receiver—Net Each..$59.95

Model 87D1566 Line Cord—For 220 v. AC-DC operation. Net Each...$2.00

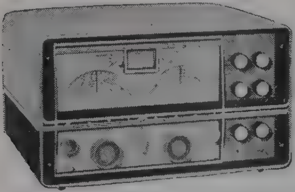
MODEL S-94, S-95 CIVIL PATROL RECEIVERS

Replace popular models S-81 and S-82. S-94 covers from 30 to 50 mc and the S-95 from 152 to 173 mc. These new sets are over 10 times as sensitive, have greatly increased audio power output and include an extremely reliable adjustable **built-in relay squelch system.** This type of squelch disables the entire audio system and not a murmur can be heard from the speaker until a signal is received. Low noise grounded grid IF amplifier; separate high gain DC amplifier for squelch system; wide impedance range antenna input system; low oscillator radiation; greater frequency stability. **Built-in speaker;** provision for headphones. **Tubes:** 8, plus one rectifier. 105/125 v., 50/60 cps., AC-DC mobile operation possible with external power converter. Gray steel cabinet, silver and red trim. **Size:** 12⅞" w. x 7" h. x 7¼" d. Shpg. Wt., 12½ lbs.

Model S-94 or S-95 Receiver—Either, Net Each.................................. $\$64^{95}$

National NC

Ham Receivers, Equipment



NC-400

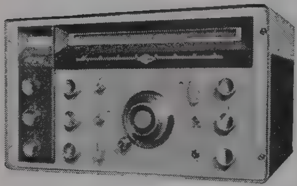
NEW MODEL NC-400 DELUXE RECEIVER

Features: Nilvar tuning gangs and ceramic coil forms used to assure low drift of .002% long term, after warm-up. Front panel selection of manual, five-position crystal and external control of HFO. Provisions for crystal control of all frequency determining circuits. Outputs provided for IF, detector, AGC and audio signals. Two RF stages and double conversion for high sensitivity and image rejection. **Frequency Range:** 540 kc to 31 mc in 7 bands. Bandspread dial provided with 0-100 logging scale and calibrated for 80-, 40-, 20-, 15- and 10-meter bands. **Sensitivity:** 1 μv for 10 db S/N ratio. **Selectivity:** Broad (16 kc); medium (8 kc); sharp (4 kc) with crystal filter not operating; very sharp (3.5 kc) using 10 tuned circuits and crystal filter; SB-1 (3.5 kc) using 14 tuned circuits; SB-2 (3.5 kc at 6 db and 10 kc at 60 db). Plug-in accessory available for use in place of crystal filter to provide front panel selection of three mechanical filters without receiver modification; enables bandwidths of 500 cps to 16 kc. **SSB Provisions:** Heterodyne detector with pentagrid converter and separate beat oscillator that may be crystal controlled if desired. Selection by 14 tuned circuits in second IF with center frequency switchable from one sideband to the other. **Fixed Channel Operation:** High frequency oscillator with five crystal sockets front panel selected; oscillator may be controlled from external master oscillator selectable from front panel. Calibrate-tune switch permits use of "S" meter to tune receiver to crystal or external oscillator frequency. **Diversity Provisions:** Special modification available for internal or external control of all oscillators; permits rear panel selection for use as master or slave fed from other oscillator; requires no auxiliary amplifiers or special circuits to drive mixers. **Controls:** Main Tuning; Bandspread Tuning; Calibrate-Tune Switch; Antenna Trimmer; Tone Switch; Audio Gain/Power; Hi-Freq. Osc. Switch; Noise Limiter; Standby Switch; Crystal Phasing; Crystal Select; BFO; RF Gain; IF Selectivity; Mode; Phone Jack; "S" Meter and Band Selector. Rear Panel: Audio output of 3.2 or 600 ohms; standby terminal panel; antenna input connector; accessory socket; test jacks for high-frequency and beat frequency oscillators; IF output connector; high-frequency oscillator input; "S" meter zero adjust.

Model NC-400 Receiver—Net Each $895.00

ACCESSORIES

Model NTS-2 Speaker—Net Each.. $21.95



NC-303

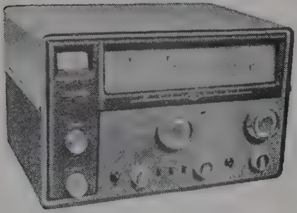
NEW MODEL NC-303 RECEIVER

Extra-versatile performer features SSB selector with IF shift; "Q" multiplier with more than 60 db rejection; IF selector; automatic noise limiter on AM and separate double-ended manual limiter for CW and SSB. Dual conversion on all bands. Tuning dial has 40:1 ratio; logging scale; fine-tuning. Giant easy-to-read "S" meter.
Coverage: 160 meters—1.8 to 2.0 mc, 80 meters—3.5 to 4.0 mc, 40 meters—7.0 to 7.3 mc, 20 meters—14.0 to 14.4 mc, 15 meters—21.0 to 21.5 mc, 11 meters—26.5 to 27.5 mc, 10 meters—28.0 to 29.7 mc. 6 meters—49.5 to 54.5 mc, 2 meters—143.5 to 148.5 mc, 1¼ meters—220 to 225 mc, WWV—10 mc (usable with accessory converter). **Audio System:** Single 6AQ5 output tube; front panel phone jack; 3.2 ohms output impedance. **Controls:** RF Gain/AC On-Off; AF Gain; Tone; AM-CW-SSB-ACC Switch; CW Pitch; Main Tuning; Calibration; Antenna Trimmer; Limiter; IF Selectivity; Band Switch; Phono Jack; Tuning Vernier; Calibrator OFF-CAL-WWV; Notch Frequency; Notch Depth; Standby-Receive. **Tubes:** RF amplifier-6BZ6, 1st converter-6BA7, 1st oscillator-6AH6, 2nd converter-6BE6, "Q" multiplier-12AX7, 1st IF amplifier-6BJ6, 2nd IF amplifier-6BJ6, ANL and detector-6AL5, heterodyne detector-6BE6, manual noise limiter-6AL5, 1st audio and "S" meter amplifier-12AT7, audio output-6AQ5, current regulator-4H4-C, voltage regulator-OB2, rectifier-5Y3GT. **Antenna Input:** 50-70 ohms. **Size:** 19½″ w. x 15″ d. x 11¼″ h. (19″ rack out of cabinet). **Cabinet:** Black and gray enamel. Shipping Weight, 64 lbs.

Model No. NC-303 Receiver—Net Each $449.00

ACCESSORIES

Model NC-300C6A Converter for 6-meter Band—Net Each	$41.95
Model NC-300C2 Converter for 2-meter Band—Net Each	43.95
Model NC-300C1 Converter for 1¼-meter Band—Net Each	45.95
Model NTS-2 Speaker—Net Each	21.95
Model XCU-300 Plug-in Crystal Calibrator—Net Each	23.95
Model XCU-303 De Luxe Crystal/WWV Calibrator—Net Each	34.95
Model B-13599 Tuning Knob—For NC-300/303. Net Each	4.95
Model C-27111 Vernier Drive Mechanism—For NC-300/303. Net Each	4.50

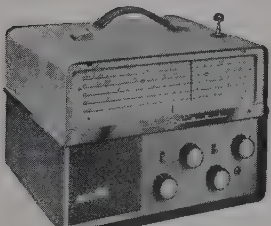


NC-188

MODEL NC-188 ECONOMY RECEIVER

A fine, general coverage amateur receiver with smart styling. Features include calibrated bandspread for 10, 11, 15, 20, 40, and 80 meter amateur bands; separate tuning capacitors, knobs, and scales for general coverage and bandspread, large easy-to-read 11-inch slide-rule dial with combination edge and back-lighting; and large tuning knobs with two pointers for two scales. **Coverage:** 540 kc to 40 mc in 4 bands plus 5 bandspread ranges for amateur bands. Receives AM, CW and SSB signals; BFO provided on CW and SSB. **Audio System:** Gang-tuned RF amplifier for increased sensitivity and image rejection. Two IF stages; two audio stages with tone control. Automatic noise limiter. Single 6AQ5 output tube provides 1.5 watts at less than 10% distortion. Separate high frequency oscillator tube increases stability. **Sensitivity:** Under 2.5 μv; 10 db signal-to-noise ratio. **Selectivity:** 6 db at 5.2 kc normal; 60 db at 22 kc normal. **Controls:** Main Tuning; Bandspread Tuning; Antenna Trimmer; Band Selector; RF Gain Control; AC On-Off and AF Gain Control; Standby/Receive Switch; Noise Limiter; Tone Control; BFO Pitch; and AM/CW Switch. **Tubes:** 3-6BA6, 1-6C4, 1-6BE6, 1-6AL5, 1-6AQ5, 1-12AT7, 1-5Y3GT. **Antenna Input:** 50-300 ohms, balanced or unbalanced. **Signal Indicator:** "S" meter on front panel aids tuning. **Cabinet:** Two-tone gray. **Size:** 16$\frac{13}{16}$″ wide, 10″ high, 10⅞″ deep. Shipping Weight, 35 lbs., approximately.

Model NC-188 Receiver—Net Each	$139.95
Model NTS-1 Table Speaker—Net Each	$17.50

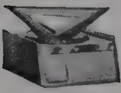


NC-66

MODEL NC-66 PORTABLE AC-DC HAM RECEIVER

World's most versatile receiver. A ham receiver, a 3-way portable, a marine receiver, an SWL receiver for home or away, indoors and out. AC/DC battery operated. **Features:** 5″ PM speaker plus phone jack for external; functional slide-rule dial; both whip and loop-stick antennas; covers marine band from 150 kc to 400 kc, including direction finder beacon service (DF unit available as accessory); salt-spray tested. **Coverage:** 150 kc to 23 mc in five bands; electrical bandspread with logging scale; fixed-tuned CW oscillator. **Audio System:** Two-stage audio amplifier with 3V4 output tube. Phone output jack plus 5″ speaker. **Controls:** Main Tuning; Bandspread; Volume Control; Band Selector; AM/CW Switch; Standby/Off/Receive Switch. **Tubes:** 2-1U4, 1-1L6, 1-1U5, 1-3V4 and selenium rectifier. **Antenna Input:** 50-300 ohms, unbalanced. **Cabinet:** Two-tone gray with chrome trim, leather carrying handle. **Size:** 12$\frac{5}{16}$″ wide, 9$\frac{11}{16}$″ high, 10″ deep. Shipping Weight. 16 lbs. (less batteries). **Accessory Available:** 220 v. AC adapter.

Model NC-66 Portable Receiver—Net Each	$99.95
Model RDF-66 Direction Finder— Net Each	$39.95



RDF-66

ACCESSORIES

HRO-60RS Rack Model Speaker—Net Each	$29.95
NFM-83-60 Narrow Band FM Adapter—Net Each	33.95
HRO-60TS Table Speaker—Net Each	19.95

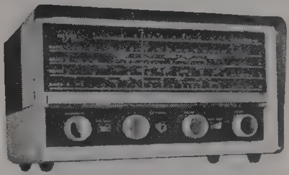
National Ham Receivers, Equipment

NC-60 SPECIAL "A" RECEIVER

n all new, low priced compact short-wave receiver.

FEATURES

- **Continuous coverage of AM broadcast, amateur and world wide shortwave bands.**
- **Full electrical bandspread on all frequencies.**
- **Four bands covering 540-1600 kc and from 1.6 to 31 mc.**
- **Twelve-inch easy-to-read slide rule dial.**
- **Civil defense, marine, aircraft, amateur and foreign shortwave stations clearly marked.**
- **Logging scale included.**



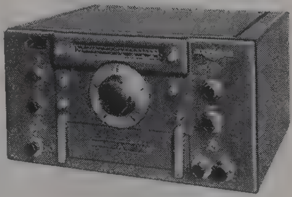
NC-60

SPECIFICATIONS

1 economically-priced, lightweight and compact short-wave receiver. **Coverage:** AM oadcast, amateur and world-wide short wave with electrical bandspread on all frequen- es; total of 4 bands. Band 1—540 to 1600 kc, band 2—1.6 to 4.5 mc, band 3—4.0 to 12 mc, nd 4—10.5 to 31 mc. C-D, marine, aircraft, amateur and foreign stations clearly marked. gging scale included. **Tuning System:** Electrical bandspread; separate general coverage d bandspread tuning capacitors connected in parallel on all bands; 2-gang capacitors; ndspread knob can be used as vernier. **Audio System:** Two-stage amplifier uses 50C5 tput tube; built-in speaker; front panel phone output jack. **Selectivity:** 6 db at 5 kc; db at 70 kc, normal. **Controls:** Tuning; Bandspread; AC Off/Volume Control; Band lector; Phone Jack; AM-CW Switch; and Standby-Receive Switch. **Antenna Input:** -300 ohms. **Tubes:** Converter-12BE6, 2nd detector-AVC, 1st audio-12AV6, audio out- t 50C5, CW oscillator-12BA6, rectifier-35W4. For 115 volt AC/DC operation. Com- te with built-in speaker. **Cabinet:** Two-tone black and gray enamel finish; 13½" w. x s" d. x 7⅝" h. Shipping Weight, 15 lbs.

odel NC-60 Receiver—Net Each	$59.95

HRO-60 DUAL CONVERSION RECEIVER



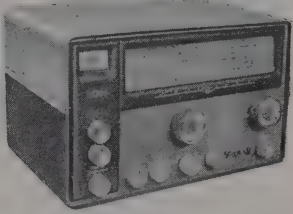
HRO-60

verage: 50 kc to 54 mc; Voice CW; NFM (with adapter). Dual conversion on all fre- encies above 7 mc. **Features:** 12 permeability-tuned circuits in the three 455 kc stages; rrent-regulated heaters in the high frequency oscillator and first mixer; high frequency cillator and "S" meter amplifier voltage regulated; extra plug-in coil sets for additional quency coverage available; crystal filter with phasing notch to reject heterodyne inter- ence; double-ended noise limiter; two RF stages; single knob control of CW, AM, 3FM (or connects audio amplifier to phono input); adjustable CW oscillator; antenna out trimmer; panel switch for 100 kc or 1000 kc calibration marker signals. **Tuning stem:** PW knob has worm gear drive box; changing number dial; logging scale, 0-500. de rule scale ganged with PW dial. **Audio System:** Push-pull output delivers 8 watts; s than 10% distortion; 8 and 500 ohms output impedances. High-Z phono jack and one jack. **Sensitivity:** 1.5 μv from 2 to 30 mc. **Controls:** Tuning Dial; Oscillator; Tone; t. Trimmer; Dimmer; AVC; Limiter; Calibration; BFO; Phasing; Selectivity; AF in/AC On-Off; RF Gain; CW-AM-NFM-Phono; B+ On-Off. **Tubes:** 2-6BA6, 2-6BE6. C4, 3-6SG7, 2-6H6, 1-6SN7GT, 2-6SJ7, 1-6V6GT, 1-OB2, 1-4H4C, 1-5V4G. **Cabinet:** nooth gray enamel finish. **Size:** Table, 19¾" w. x 10⅛" h. x 16" d.; Rack, 19" w. x ½" h. x 17¹⁄₁₆" d. (from rear of front panel including 1⅛" handle). Shipping Weight, lbs. Complete with Model HRO-60A, -60B and -60C coils.

odel HRO-60R Rack Model—Net Each	$745.00
odel HRO-60T Table Model—Net Each	$745.00

ACCESSORIES

odel HRO-60RS Rack Speaker—Net Each	$29.95
odel HRO-60TS Table Speaker—Net Each	19.95
odel HRO-60AA Coil—Net Each	49.95
odel HRO-60AB Coil—Net Each	49.95
odel HRO-60AC Coil—Net Each	49.95
odel HRO-60AD Coil—Net Each	49.95
odel HRO-60A Coil—Net Each	49.95
odel HRO-60B Coil—Net Each	49.95
odel HRO-60C Coil—Net Each	49.95
odel HRO-60D Coil—Net Each	49.95
odel HRO-60E Coil—Net Each	49.95
odel HRO-60F Coil—Net Each	49.95
odel HRO-60G Coil—Net Each	49.95
odel HRO-60H Coil—Net Each	49.95
odel HRO-60J Coil—Net Each	49.95
odel HRO-60-XCU-2 (100/1000 kc Crystal Calibrator)—Net Each	29.95
odel HRO-650S 6 v. Vibrator Type Supply—Net Each	75.00
odel NFM-83-60 (NFM Adapter)—Net Each	33.95

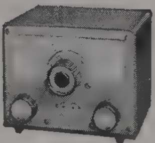


NC-109

NC-109 CW, SSB RECEIVER

ter provides five degrees sharp selectivity plus normal bandwidth on voice. Big "S" ter shows signal strength and aids for accurate tuning. **Coverage:** 540 kc to 40 mc in ands with calibrated bandspread for amateur bands. **Audio System:** Two stage audio plifier with 1-6AQ5 output tube provides 1.5 watts at less than 10% distortion. Output pedance 3.2 ohms on phone jack (accessory speaker is available). RF stage gang-tuned; F and 2 AF stages. Separate high frequency oscillator tube increases stability. Ceramic l forms are temperature compensated for additional stability. Series type automatic se limiter built in. **Drift:** .01% or less. **Sensitivity:** 1-2 μv (10 db signal-to-noise ratio). **ectivity:** 6 positions with constant gain; 6 db at 5.2 kc (Normal) and 200 cycles (Sharp); db at 29 5 kc (Normal); 4 additional intermediate degrees of sharpness. **Controls:** Main ning; Bandspread Tuning; Antenna Trimmer; Band Selector; RF Gain; AC On/Off and Gain Control; Standby; Mode Selector for ANL, AM, CW, SSB and ACC; Tone ntrol; BFO Pitch Control; Selectivity Control; and Phasing Control. **Tubes:** 2-6BE6, BA6, 1-6C4, 1-6AL5, 1-6AQ5, 1-12AT7, 1-5Y3GT, 1-OB2. **Antenna Input:** 50-300 ms, balanced or unbalanced. **Cabinet:** Two tone gray wrinkle finish; 16¹³⁄₁₆" w. x 10⅞" d. 0" h. Shipping Weight, 35 lbs. approximately.

odel NC-109 Receiver—Net Each	$169.95



VFO-62

ACCESSORIES

odel NTS-1 Table Speaker—Net Each	$17.50
odel NC-109XCU Crystal Calibrator—Net Each	20.95
odel NFM-83-60 NFM Adapter—Net Each	33.95

MODEL VFO-62 SELF-POWERED 2- AND 6-METER VFO

n be used with transmitters using 8 mc oscillator circuits. **Features:** Front panel con- lled 1 mc calibration crystal socket. Crystal socket for instant frequency selection hout transmitter connection changes. Built-in phone jack for direct detection of calibra- n markers. Precision, vernier-drive tuning. Remote standby-operate control. Front nel mode switch and band switch. **Coverage:** Full, 6-meter and 2-meter. **Frequency ability:** Better than 0.1% on cold start; .005% after 30-minute warm-up. **Power quired:** 18 watts in 24 hours from 117 v. AC outlet. **Cabinet:** Modern, gray plastic. e: 6½" wide x 5¼" high x 5½" deep. Shipping Weight, 6 lbs.

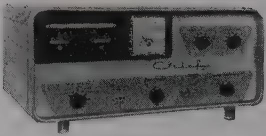
odel VFO-62—Net Each	$69.95

AS NEW NATIONAL RADIO COMPANY AMATEUR EQUIPMENT AND ACCESSORIES BECOME AVAILABLE, WE WILL HAVE THEM IN STOCK. PLEASE INQUIRE.

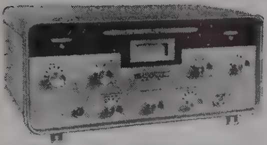
GLOBE electronics

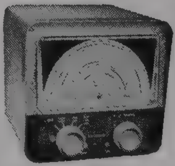
Globe Amateur Equipment

CB-100

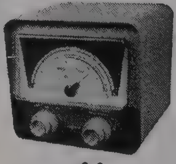

"Chief"

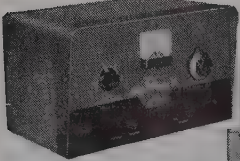
350

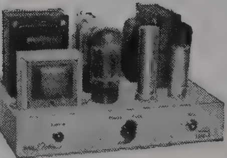

"Scout"


755A

LA1


6-2


AT-4


UM-1

GLOBE MODEL 6-2 VFO, KIT

Designed especially to drive the Hi-Bander and similar transmitters on 6 and 2 meters. King-sized tuning scale; perfect zero beat with exclusive VFO bandspread; built-in, filtered power supply with voltage regulation. Temperature compensated for stability. Calibrate switch permits zero beating without turning on transmitter. Plugs directly into crystal socket of transmitter. Dial has 13:1 tuning ratio; calibrated every 50 kc. Drift, .003% on 6 meters, .006% on 2 meters. Approximately 50 v. RF output.

Model 6-2 VFO—Wired and tested. Net Each.. $59.95

Model 6-2 VFO—Kit form. Net Each................$49.95

GLOBE MATCHER, SR. ANTENNA TUNER, KIT

Designed for any transmitter with final RF input up to 600 watts. Features built-in SWR bridge constantly in circuit; fixed link coupling in output circuit. Special calibrated meter for monitoring actual SWR. Coax input; 2-wire balanced output. Cabinet is RF shielded.

Model AT-4 Antenna Tuner—Wired and tested. Net Ea. $79.50

Model AT-4 Antenna Tuner—Kit form. Net Each....$69.50

GLOBE MATCHER, JR. ANTENNA TUNER, KIT

For use with any transmitter with input of 100 watts CW, 75 watts phone or less. Provides substantial harmonic attenuation when properly tuned. Helps match transmitter output to various high impedance antenna types. Unbalanced output. Self-contained.

Model AT-3 Antenna Tuner—Wired and tested. Net Each.. $15.95

Model AT-3 Antenna Tuner—Kit form. Net Each....$11.95

GLOBE UNIVERSAL MODULATOR, KIT

Supplies 10 to 45 watts audio output, depending on tube types and class. **Uses:** Class A or B modulator (RF inputs 8 to 80 watts); driver for higher power modulator; PA amplifier. **Features:** 500-20,000 ohms output. Can be used with crystal or carbon mike. Perforated steel cover available.

Model UM-1 Modulator—Wired and tested; with 6U8, 5U4GB and two 6L6 tubes. Net Each................ $49.95

Model UM-1 Modulator—Kit form, less tubes. Net Ea..$34.95

Cover—For above modulators. Net Each.............. 3.00

GLOBE MODEL CB-100 CITIZEN'S BROADCASTER

FOR 11-METER OPERATION

Complete 11 meter tranceiver for universal operation. Can be used in home, car, office or field without exterior converter, sinc it operates on 115 v. AC or 12 v. DC. Power input of 5 watts Provides for several times the effective coverage of many simila units operating on the 460 mc band. Any citizen over 18 years o age may operate the unit on any of the 22 channels in the FCC-assigned 27 mc range for transmitting and receiving. Meets al FCC requirements. Superhet circuit for better reception. Channe switch allows choice of three channels for operation. Receive and transmitter units are tuned to the same channel simultaneously. Operation is extremely simple with only three controls Channel; Squelch, and On/Off-Volume. Squelch subdues background noise for muted standby operation. Push-to-talk operatio for instantaneous transmission or reception. Ten tube receiver/ transmitter, AM modulated, crystal controlled for stability o operation. All channels may be covered with the proper crystals tested pairs are available for any channel. Carrying handle act as tilt stand for fixed operation or as mounting bracket for permanent installation. **Size:** 13" x 10½" x 3½". Weight, 9 lbs.

Model CB-100 Transceiver—Complete with crystals for one channel and push-to-talk mike for ease of operation. Net Each.. $129.9

12 v. DC Cable and Plug for CB-100—Net Each........$2.75

NEW GLOBE CHIEF DELUXE TRANSMITTER, KI

Sturdy rig in compact design with complete bandswitching 1 through 80 meters; provides 90 watts input. Thoroughly filtered this unit has a built-in power supply. Pi-network built to matc most antennas from 52 to 600 ohms. Modified grid-block keyin for maximum safety. Meter and cabinet carefully shielded fo reduction of unwanted TVI. Instructions for VFO input are incorporated. Kit form includes complete manual and tubes an parts. **Size:** 15¼" x 6¼" x 11¼". Shipping Wt., 31 lbs.

Globe Chief Deluxe—Wired and tested. Net Each..... $79.9

Globe Chief Deluxe—Kit form. Net Each............$59.9

GLOBE CHAMPION TRANSMITTER

Bandswitching transmitter provides 350 watts CW, 275 wat phone and 400 watts SB (PEP with any 10 watt external exciter). Covers 10 to 160 meters. Single switch bandswitchin Extensively TVI suppressed, filtered and bypassed. High lev Class B modulation sustained without usual clipping distortio by use of commercial-type compression circuit. Features pi-network output circuit of 52-300 ohms, built-in VFO, push-to-talk antenna changeover relay and improved time-sequence keying. Final tubes are air cooled for added safety factor. **Size:** 12" 21⅜" x 17", self contained.

Model 350 Transmitter—Wired and tested. Net Each.. $495.00

NEW GLOBE SCOUT DELUXE TRANSMITTER, KI

Compact, self-contained transmitter has bandswitching over 6 through 80 meter range; provides input of 90 watts CW, 75 wat phone, plate modulated. Built-in power supply. High level pla modulation is maintained. Features pi-network output on 1 through 80 meters; link-coupled on 6 meters matching into lo impedance beams. New type shielded meter. **Size:** 15¼" x 6½ x 11¼". Shipping Weight, 35 lbs.

Globe Scout Deluxe—Wired and tested. Net Each.. $149.9

Globe Scout Deluxe—Kit form. Net Each..........$119.9

GLOBE MODEL 755A VFO, KIT

Fully bandswitching with "crystal stability". Calibrated 1 through 160 meters with output on 160 and 40 meters. Built-i power supply. Calibrate switch for zero-beating signal frequenc Approximately 50 volts RF output. Temperature compensate Improved, shock absorbing, vernier dial has 19:1 tuning rati

Model 755A VFO—Wired and tested. Net Each.. $59.9

Model 755A VFO—Kit form. Net Each..............$49.9

GLOBE LINEAR AMPLIFIER, KIT

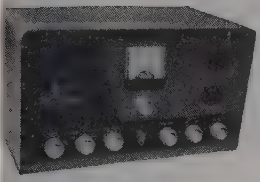
Grounded-grid type complete with well-filtered power supply f operating Class B or C units. Input 200 watts with AM Class B 300 watts DC or 420 PEP, Class B Linear SSB or DSB. Require 15 watts RF driving power. Uses 7 to 15 watts driving power f 300 watts input Class C for CW. Pi-network output circuit cove 10 to 80 meter bands; matches loads of 30 to 150 ohms. Pi-li coupled 52 ohm output on 6 meters. Extensively bypassed, filter and shielded for TVI.

Model LA-1 Linear Amplifier—Wired and tested. Net Each.. $124.5

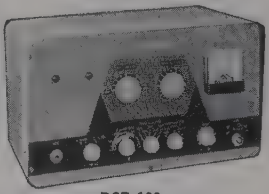
Model LA-1 Linear Amplifier—Kit form. Net Each...$99.5

461-59C

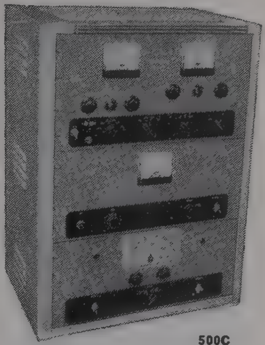
Globe Amateur Equipment



VHF-62



DSB-100



500C

GLOBE HI-BANDER TRANSMITTER, KIT

:omplete bandswitching transmitter for 6 and 2-meter VHF
,uencies; provides a power input of 60 watts CW and 55 watts
on both bands. Extra, built-in versatility provided with plug-
acilities for mobile power supplies; external dropping resistor
y be used for 12-volt systems. Straight-through operation of
l on both 6 and 2 meters assures maximum efficiency; reduces
I and harmonics to a minimum. New duo-band final tank cir-
, eliminates switching and adds efficiency. Four stage RF sec-
n features metering on all stages. Variable antenna loading
trol permits use with 20 to 72-ohm coaxial output. Unit uses
ndard 8 to 9 mc crystals for accurate coverage. By-passed,
pressed TVI assured through internal shielding. Provisions for
vering external equipment such as clipper, relay or VFO is
plied; perfect for operation with Globe 6-2 VFO. Handsome,
lern metal cabinet. **Size:** 8″ x 9″ x 14″. Wt., 30 lbs.
del VHF-62 Transmitter—Wired and tested. Net. $\$149^{95}$
del VHF-62 Transmitter—Kit form. Net Each....**$119.95**

GLOBE SIDEBANDER DSB TRANSMITTER, KIT

ndswitching transmitter for double sideband, AM and CW
ration. Covers 80 to 10 meters on 100 watts PEP. DSB; 40
ts AM; 50 watts CW. Automatic balancing and floating grid
uit holds carrier suppression to 35 db or better. Can be used
n your present AM equipment for sideband, using standard
stals and regular VFO. Features three-stage RF section, pi-
work, speech clipping, internal tone generator and narrow
dwidth. Ample 600 volt power supply permits use with VFO,
X and similar accessories. Provision for antenna relay control.
e: 8″ x 14″ x 9″. Shipping Weight, 30 lbs.
del DSB-100 Transmitter—Wired and tested. Net. $\$149^{95}$
del DSB-100 Transmitter—Kit form. Net Each...**$119.95**

GLOBE KING TRANSMITTER

l 540 watts input on phone, CW and SB (PEP with any 10 watt
rnal exciter); outperforms any rig in its price range. Band-
tching coverage from 10 to 160 meters. Transmitter is relay
trolled; includes built-in antenna relay, built-in VFO and
arate power supply for modulator section for better overall
tage regulation. Commercial-type compression circuit keeps
lulation at high level. Grid-block keying for signal clarity.
network matches most antennas 52 to 300 ohms. Provisions for
stal operation. Handsome cabinet suppresses TVI. Final 6156
e increases safety factor. **Tubes:** 2-866A, 1-5U4G, 1-6AU6,
CB6, 1-OA2, 2-811A, 1-6L6, 1-6C5, 1-6SJ7, 2-816, 1-6AL5,
Y3, 1-6146, 1-6AG7, 1-6X5, 1-12AU7 and 1-6156. **Size:** 31″
2″ x 14¾″.
del 500C Transmitter—Wired and tested. $\$795^{00}$
t Each.......................................

GLOBE SCREEN MODULATOR KIT

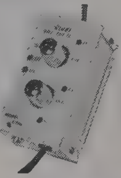
use with Globe Chief but with instructions for use with other
nsmitters. Permits radio telephone-operation of CW transmitter
minimum cost. All connections from modulator to transmitter
luded. Self-contained unit. Kit complete with printed circuit
rd and all parts.
del SM-90 Screen Modulator—Kit form. Net Each. $\$11^{95}$

GLOBE PH-1 PATCHER

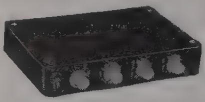
sy to install and operate. Switch selection of 500-8 or 3.2 ohm
aker terminal connection; no additional or external trans-
mer necessary. Operates automatic voice control on sideband or
h-to-talk on AM due to hybrid system. May be used with all
ular amateur equipment. Manual balance control for com-
nsation of line unbalance. Standby switch permits placing land
call without energizing transmitter. Separate gain controls for
eiver and transmitter permit proper adjustment and balance.
mpletely shielded and RF by-passed to eliminate RF feedback.
ceiver speaker disconnected; audio comes through handset when
one patch is turned on. Compact, steel book shelf cabinet. All
essary connectors supplied for either SB or AM. **Size:** 9″ w. x
″ d. x 1⅝″ h.
del PH-1 Patcher—Wired and tested. Net Each.... $\$29^{95}$

GLOBE SIX-METER CONVERTER

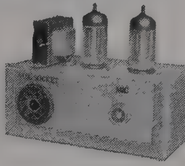
proved signal-to-noise ratio; high sensitivity; higher gain. Com-
tely shielded to minimize feed-through of unwanted signals.
nted circuit construction. Works with all types of communica-
ns receivers and car radios. Kit assembles easily. With tubes,
stal, and cables. **Size:** 3″ x 5½″ x 4½″.
del 6-PMC-1W—10-14 mc. Wired and tested. Net. $\$29^{95}$
del 6-PMC-1K—Kit version of above. Net Each....**$21.95**
del 6-PMC-2W—550-1600 kc. For use with 6 or 12 v. auto
lios. Crystal tuning range: 50-51 mc. Wired and $\$29^{95}$
ted. Net Each.......................................
del 6-PMC-2K—Kit version of above. Net Each....**$21.95**



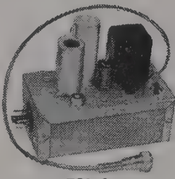
6-PMC



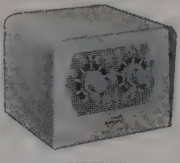
PH-1



SM-90



FCL-1



VOX-10

GLOBE VOX-10 VOICE CONTROL, KIT

Modernizes your system for automatic operation on DSB, SSB or AM; permits switching from receiver to transmitter by merely speaking into your mike. Works equally well with any AM or SSB transmitter. Control permits VOX or manual operation. Variable sensitivity and delay controls permit adjustment to meet your specific needs. Plugs directly into the Globe Sidebander DSB-100; may be used with Globe Scout, Champion or similar transmitters with 3 or more speech stages. Simple connection to all transmitters. Compact, modern steel cabinet. **Size:** 5¾″ w. x 5″ d. x 4¾″ h. Shipping Weight, 3½ lbs.
Model VOX-10—Wired and tested. Net Each......... $\$29^{95}$
Model VOX-10—Kit form. Net Each.................**$19.95**

Model QT-10 Anti-Trip Unit—Accessory device plugs into socket provided in VOX-10 for automatic receiver control. Net..**$9.95**

GLOBE FCL-1 SPEECH BOOSTER, KIT

Peak limiting audio preamplifier increases intelligibility; acts as a limiter by keeping the voltage output at a specific level regardless of input. Attenuates highs and lows exceeding a pre-set amplitude; reduces distortion through harmonic suppression. Increases readability 100% with screen and choke modulation systems. Connects directly between mike and transmitter mike input; plugs directly into the Globe Scout and Highbander; adapts to other equipment with ease. **Frequency Response:** 300-2,500 cps. **Power Required:** 400-450 v. DC at 5 ma; 6.3 v. AC at 0.6 amp. **Tubes:** 1-12AX7, 1-6AL5. **Size:** 2″ x 3″ x 5″.
Model FCL-1 Clipper—Wired and tested. Net Each... $\$24^{95}$

Model FCL-1 Clipper—Kit form. Net Each...........**$15.95**

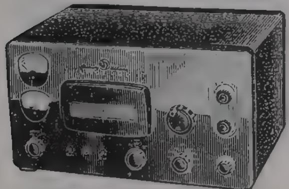
GLOBE PB-1 POWER BOOSTER, KIT

Increases the Globe Scout output approximately 50% on the 6-meter band while attenuating TVI. Permits straight-through operation of final amplifier on 6 meters with only minor transmitter wiring modifications. Plugs directly into oscillator tube sockets.
Model PB-1 Booster—Wired and tested. Net Each.... $\$21^{95}$
Model PB-1 Booster—Kit form. Net Each...........**$14.95**

GLOBE PA-1 POWER ATTENUATOR

Use with transmitters up to 50 watts input; permits swamping drive to linear amplifiers. Three power reduction positions for versatility. Coax input and output.
Model PA-1 Attenuator—Wired and tested. Net Each. $\$10^{95}$

E. F. Johnson Amateur Gear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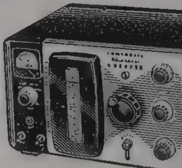
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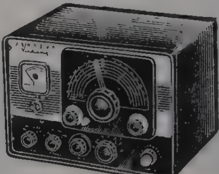
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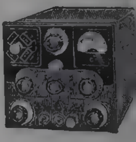
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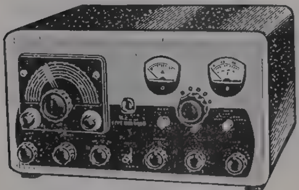
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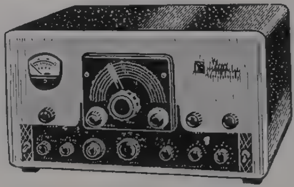
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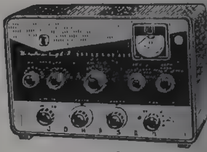
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NEW VIKING "THUNDERBOLT" AMPLIFIER (FIG. A)

A full 2,000 watts P.E.P. input; equivalent to one kilowatt **average.** Companion to the "Navigator", "Ranger", or "Pacemaker" transmitters; requiring 10 watts in class AB_2 linear or 20 watts class C continuous wave. Wide range pi network matches line impedances from 40 to 600 ohms. Self-contained internal blocking bias, voltage regulator, screen and bias supplies. Two meters: plate current meter and grid current or plate voltage meter. **Frequency Range:** Continuous 3.5 to 30 mc, bandswitched. **Power Input:** 1,000 watts CW, Class C; 800 watts AM linear, Class AB_2; 2,000 watts P.E.P. linear, class AB_2. **Power Required:** 105-125 v. AC 2-wire or 210-240 v. AC 3-wire, 50-60 cps single phase. Fuses on rear of chassis. **Tubes:** Two 4-400A, two 866A, one 6BY5GA, one 5U4GA, one VR75, two VR105, two VR150. **Cabinet:** Cadmium plated steel, with maroon and gray finish, green nomenclature; 21" x 11 5/8" x 14 1/4". Shipping Wt., 140 lbs.

Johnson No. 240-353-1 Kit—With tubes. Net Each.. $524.50

Johnson No. 240-353-2—Wired and tested. Net Each.. $589.50

NEW VIKING "COURIER" LINEAR AMPLIFIER (FIG. B)

Compact, bandswitching amplifier that delivers full communication power—500 watts P.E.P. input as a class B linear type; 500 watts on CW; or 200 watts in AM linear mode. Requires 5 to 35 watts drive, depending on mode and frequency desired. May be driven by Viking "Navigator," "Ranger," "Pacemaker" or equivalent. High efficiency pi network matches line impedances from 40 to 600 ohms. Built-in blocking bias. Full TVI suppression and filtering. Self-contained power supply. **Frequency Range:** 3.5 thru 30 mc, bandswitched. **Power Required:** 105-125 v. AC, 50-60 cps single phase. Fused line plug. **Tubes:** 2-811A, 2-866A. **Cabinet:** Cadmium plated steel, maroon and gray finish, green nomenclature: 15" x 9" x 11 5/16". Shipping Weight, 68 lbs.

Johnson No. 240-352-1 Kit—With tubes. Net Each.. $244.50

Johnson No. 240-352-2—Wired and tested. Net Each.. $289.50

NEW VIKING "NAVIGATOR" TRANSMITTER-EXCITER (FIG. C)

Forty-watt unit for the CW operator requiring flexible, highly stable VFO; first rate keying system; means for rapid QSY and bandswitching with substantial RF output. RF power ample to excite most high-powered amplifiers on CW or AM. Wide range pi network matches line impedances 40 to 600 ohms. Bandswitching 160 through 10 meters. Internal VFO or crystal control provides full TVI suppression and filtering. Timed sequence keying system applies wave shaping to the keyed amplifier stages for perfect "make and break" on signal; eliminates clicks and chirps; operates without relays, using a dual triode plus a rectifier tube for grid block bias. **Frequency Range:** 160, 80, 40, 20, 15, 11, 10 meters. **Power Input:** 40 watts CW. **Power Required:** 105-125 v. AC, 50-60 cps single phase. Transformer power supply for isolation and safety. Fused line plug. **Tubes:** 6AU6, 6CL6, 6146, 12AU7, 6X4, 5U4, VR-150. **Cabinet:** Aluminum, finished in gray and maroon, green nomenclature; 13 1/4" x 9 1/8" x 10 1/16". Shipping Weight, 27 lbs.

Johnson No. 240-126-1 Kit—With tubes; less crystals and key. Net Each.. $149.50

Johnson No. 240-126-2—Wired and tested; less crystals and key. Net Each.. $199.50

VIKING "MOBILE" TRANSMITTER (FIG. D)

Power-packed mobile transmitter kit for advanced amateurs. 60 watts PA input; instant bandswitching (75, 40, 20, 15, 11 and 10 meter) gang tuned. 100% AM modulation. Sufficient gain for high imped. or carbon mike. **Tubes:** RF Sect. 6BH6 osc., 6AQ5 buffer/doubler, 807 PA. Modulator PP 807, 6BH6 speech amp. and 6BH6 driver. RF bias system protects RF tubes and modulators. Tune-Receive-Transmit switch enables non-swish VFO tuning an receiver muting. Unit may be wired for either 6 or 12 volts. Ki complete with all parts and instr., less tubes, crystals, mike an power supply. Dimensions: 6 7/16" x 7 1/8" x 10 5/16". Shpg. Wt., 16 lbs

Johnson No. 240-141-1 Mobile Transmitter Kit— Net Each.. $107.0

Johnson No. 240-141-2 (6-volt); No. 240-141-12 (12-volt)—Viking "Mobile" wired and tested less tubes, crystal, mike an power supply. **Available on special order. Prices on request**

VIKING "500" TRANSMITTER (FIG. E)

A complete 500 watt transmitter (80 through 10 meter bands) All exciter stages ganged to VFO tuning. Two units: RF uni (illus.) and a power supply/modulator unit. All operating control on front panel of RF unit. Crystal or VFO control; instant bandswitching; TVI suppressed and filtered; Pi-L network output circuit; tamper-proof, key-operated main switch; cabinet interlocks excitation and bias failure protection; fused filament and plat supplies; high voltage time delay. **Frequency:** 80, 40, 20, 15, 11 10 meters. **Power Input:** CW, 600 watts; AM Phone, 500 watts SSB, 500 watts (P.E.P. with auxiliary SSB exciter). Operates o 115 v. AC (2-wire), or 115-230 v. AC (3-wire), 50-60 cps, singl phase, 1500 watts. **Tubes:** 1-6AU6, 1-OA2, 2-6CL6, 1-5763 4-400A, 1-12AU7, 1-807, 1-12AX7, 1-6AL5, 1-6B4G, 2-811A 1-6AX5GT, 1-5U4G, 2-866/866A, 1-VR105, 4-VR150. Shippe complete with tubes, less crystals, key and mike. Size: RF UNIT —11 5/8" x 21 1/8" x 17 3/8"; POWER SUPPLY—10 7/8" x 20 3/8" 15 3/4". Shipping Weight, 200 lbs.

Johnson No. 240-500-1 Kit—Net Each............ $749.5

Johnson No. 240-500-2—Wired and Tested. Net Ea. $949.5

VIKING "VALIANT" TRANSMITTER (FIG. F)

Built-in VFO or crystal controlled; completely bandswitching (16 through 10 meters); temperature-compensated VFO—operates i 1.75 to 2.0 mc and 7.0 to 7.45 mc ranges. Pi-network matche antenna loads, 50-600 ohms. Offers complete TVI suppression timed sequence (grid block) keying; high gain, push-to-talk audi system for use with high-Z crystal or dynamic mikes; low leve audio clipping; built-in low-pass audio filter; self-contained powe supplies; single control mode switching. As exciter, unit will driv any popular kilowatt level tube and provide high quality speec driver system for high powered modulators. TVI receptacle permits use as filament and plate power source and as modulator fo auxiliary equipment. **Frequency:** 160, 80, 40, 20, 15, 11, 10 meters **Power Input:** CW, 275 watts; SSB, 275 watts (P.E.P. with auxiliary SSB exciter); AM Phone, 200 watts. Operates on 105-12 v. AC, 50-60 cps, sin. ph. Transmitter fuses in 115 v. power plug separate internal fuse for low voltage power transformer and associated components. **Tubes:** 1-6AU6, 1-OA2, 1-6CL6, 1-5763 5-6146, 1-12AX7, 1-6AL5, 1-6C4, 2-12AU7, 2-866A, 1-6AQ5 1-5V4G, 1-6BY5GA, 2-VR-105. Shipped complete with tubes, les crystals, key and mike, 18 ga., maroon and gray steel cabinet 11 5/8" x 21 1/8" x 17 3/8". Shipping Weight, 83 lbs.

Johnson No. 240-104 Kit—Net Each............ $349.5

Johnson No. 240-104-2—Wired and tested. Net Each $439.5

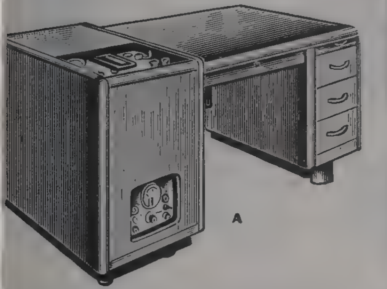
VIKING "6N2" VHF TRANSMITTER (FIG. G)

Instant bandswitching (6 and 2 meters); completely shielded TVI suppressed. Can be used with "Ranger", Viking I, Viking I or similar power supply-modulator combinations capable of a least 6.3 v. AC at 3.5 amp., 300 v. DC at 70 ma., 300-750 v. DC a 200 ma., and 30 or more watts of audio. May be operated b external VFO or built-in crystal control (8-9 mc crystals used i pentode oscillator which doubles in plate circuit). Provision fo zeroing VFO. Tune-Standby-Operate switch permits tune-u through driver and receiver zeroing. **Frequency:** 6 and 2 meter **Power Input:** CW, 150 watts; AM Phone, 100 watts. **Tubes** 2-6U8, 1-6360, 1-5894 (final), 1-6AQ5. Shipped complete wit tubes, less crystals, key and mike. Maroon and gray cabinet, 13 1/8 x 8 3/8" x 8 1/2". **Weight:** Net, 10 lbs.; Shpg., 14 lbs.

Johnson No. 240-201-1 Kit—Net Each............ $129.5

Johnson No. 240-201-2—Wired and tested. Net Ea.. $169.5

E. F. Johnson Amateur Gear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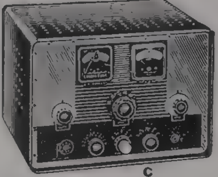
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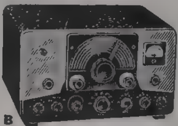
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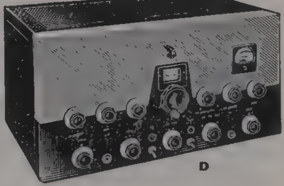
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VIKING "KILOWATT" AMPLIFIER (FIG. A)

ntains every conceivable feature for safety, operating con- ience, and peak performance. Low power or maximum legal ut AM, CW, SSB selected by flip of single switch. Continuous ing from 3.5-30 mc; no coil change needed. Pedestal contains nplete unit including RF power amplifier, modulator, power plies, and all control equipment. Entire unit rolls out of lestal for adjustment or maintenance. **Excitation Require- nts:** RF—30 watts; AM—10 watts; SSB—2-3 watts peak. addition to complete shielding and the use of double L section ers in every external lead, the amplifier chassis is divided into npartments to isolate strong RF fields. The completely enclosed ter compartment also utilizes double L section TVI filters in h outgoing lead. Contact washers are used on all control shafts effective grounding. Shielded leads in critical RF fields and inductance bypassing at appropriate circuit points further press harmonic energy.

wer Input: (High power position) 1 KW on CW and AM phone, W P.E.P. input SSB Suppressed Carrier; (Low power position) watts on CW (Tune) and AM phone. **Tubes:** Two 4-400A final plifier; two 810 modulator, Class B; two 872A high voltage rec- er; one 5R4GY screen rectifier; one 5V4G bias rectifier; two .150 and two VR105 screen voltage regulators; one VR90 bias ulator. **Maximum Power Consumption:** (AM Hi-Transmit), 0 watts (does not include exciter power requirements). **Con- tors:** Polarized three-wire plug and an octal plug furnished to te with AC input receptacle and audio and control input eptacle. Two PL-259 coaxial cable connectors are required for input and antenna output. **Fusing:** Filaments and Bias Supply mary fuse located on front panel, 5 amp. cartridge type. **Pri- ry AC Voltage:** 210-240 v. AC, 50-60 cycles, single phase; -120 v. AC, 50-60 cycles, single phase (recommended only when quate heavy duty wiring from electric power source is avail- e). **Safety Interlock Switch:** Breaks primary circuit when nsmitter is removed from cabinet.

nson No. 240-1000 Viking "Kilowatt" Power Amplifier—th tubes, furnished wired, adjusted, and laboratory tested. talled in pedestal. Soft gray, with maroon trim and green nenclature. 29½" h., 19¾" w., 32⅞" d. Weight, roximately 400 lbs. Net Each................ $1595.00

nson No. 251-101-1—Matching accessory desk top, back, and ee drawer unit for mounting to right of "Kilowatt" pedestal. e with Amplifier, 29½" h., 63½" w., 32⅞" d. Wt., roximately 155 lbs. Net Each (F.O.B. Corry, Pa.). $132.00

nson No. 251-101-2—Same as above, but mounts to left of lestal.

KING "RANGER" TRANSMITTER-EXCITER (FIG. B)

f contained, TVI suppressed, 75-watt CW or 65-watt phone nsmitter, 100% modulated. Pi-net antenna load matches 50 to ohms. As exciter, will drive KW level tubes, provides speech ver system for high powered modulators. Built-in, stable VFO. arate calibrated scales for each of the seven bands on wide dspread dial. Excellent (break-in) keying stability. Nine-pin eptacle on rear provides RF and AF leads for exciter operation, s 6.3 v. AC at 5.5 amps, 500 v. DC at 500 ma, 300 v. DC at up 50 ma along with the full 33 watts output of the modulator. **bes:** 6AU6 VFO, 2-6CL6 crystal oscillator and buffer, 6146 l amplifier, 6AQ5 clamper, 12AX7 speech amp., 12AU7 audio ver, 2-1614 P-P mod., 6AX5 low voltage rect., OA2 volt reg., L5 bias rect., 5R4GY high voltage rect. 15" x 11$\frac{5}{16}$" x 9". pping Weight, 54 lbs.

nson No. 240-161-1 Viking "Ranger" Kit—h tubes, less crystal, key and mike. Net Each.... $229.50

nson No. 240-161-2 Viking "Ranger" -Same as above but fully wired and tested. With tubes. Net $329.50

VIKING "CHALLENGER" TRANSMITTER KIT (FIG. C)

gle knob bandswitching phone-CW transmitter. Rated at 120 ts CW, 70 watts AM phone input, 80, 40, 20, 15 and 10 m.; watts CW, 70 watts AM phone, 6 m. A single 6DQ6A buffer ves two 6DQ6A bridge neutralized tetrodes in final amplifier. h "Q" wide-range pi network coupling ranging from 40 to 600 ns and will tune out large amounts of reactance. Three RF ges for easier tuning, improved stability and reserve drive. vision for crystal or external VFO control. May use any stal or high impedance dynamic microphone. 100% AM modu- d. No keying chirps. Excellent TVI suppression and filtering. **:** 13¼" w. x 10$\frac{1}{16}$" d. x 9⅛" h. Shipping Weight, 30 lbs.

nson No. 240-182-1 Viking "Challenger" Kit— , Each.................................... $114.75

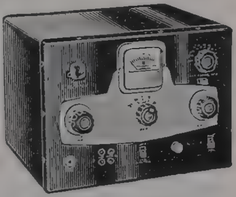
nson No. 240-182-2 Viking "Challenger"—Same as kit above, fully wired and tested. Net Each.............. $154.75

VIKING II CDC TRANSMITTER (FIG. D)

Civil defense unit with general coverage communications transmitter, 1.7 to 30 mc, 180-watt CW and 135-watt phone output. Has 11-position bandswitch for 10 crystals and external VFO. Final amplifier works two parallel 6146's into pi-network handling 50-600 ohm resistive loads; provides up to 30 db second harmonic attenuation. High gain audio circuit with push-to-talk control for high-Z crystal or dynamic microphones. Modulation limiting system provides more than 6 db fast-acting compression. Positive limiting of occasional small peaks passed by low-level control system. Complete TVI suppression. Flexible contact strip sealed cabinet. Special shields for dial window and meter. "L" type filters for primary power lead, antenna relay terminals, VFO receptacle, key jack, and mike connector. **Size:** 20" w. x 13" d. x 10$\frac{5}{16}$" h. Shipping Wt., 78 lbs. Complete specification sheet is available upon request.

Johnson No. 240-102-16 Viking II **CDC Transmitter**—With tubes, less crystals, key and mikes. Wired and tested. Net Each.................................... $430.00

VIKING "ADVENTURER" CW KIT



Single knob bandswitching CW transmitter with 807 tetrode in final stage. 50 watts power input, crystal controlled. Provision for use of external VFO. Pi-network tuner eliminates need of external antenna tuner, permits use of wide choice of antennas. Dual service, self-contained power supply. Power receptacle for use of full 450 v. DC at 150 ma. and 6.3 v. AC at 2 amps. as auxiliary supply when transmitter is not in use. **TVI suppressed.** Kit requires little or no construction experience to build or operating experience to use. Simplified instructions included. Completely enclosed in shielded, etched aluminum cabinet, maroon and gray with green nomenclature. **Size:** 7⅜" x 10¾" x 8⅛". Shipping Weight, 19 lbs.

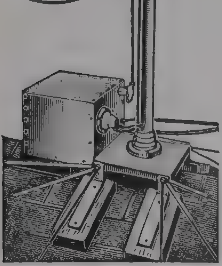
Johnson No. 240-181-1 Viking "Adventurer"—Complete with tubes. Net Each........................ $54.95

NEW VIKING "PACEMAKER"

Unique circuitry uses only one mixer for improved spurious signal rejection greater than 50 db. Balanced range audio does not sacrifice low frequency response as do filter-types. Highly stable, built-in VFO covers all bands without crystal switching or retuning; temperature compensated and voltage regulated; with lighted dial. Front panel carrier balance for optimum carrier rejection. No fixed impedance output circuit; wide range pi-network handles 50-600 ohm loads, assures proper load impedance to final amplifier. Individual crystal control of sideband generating frequency for each band. This SSB transmitter has a 90-watt power input and a power output of over 60 watts on all bands, 80 watts through 10 meters. CW and SSB Power input on AM phone, 35 watts. SSB signal heterodyned with VFO to arrive at operating frequency. Voice controlled operation provided. Adjustable VOX threshold and anti-trip controls. Triple-section power supply provides high and low voltages for all sections as well as bias voltage for the transmitter and for control of a high-powered final amplifier. Voltages to final amplifier screen, balanced modulator, and VFO regulated with VR tubes. Supplied wired, tested, and with all control connector plugs furnished. Maroon and gray finish; green numbers. Shipping Weight, 74 lbs.

Johnson No. 240-301-2 Viking "Pacemaker"—Net.. $495.00

E. F. Johnson Amateur Gear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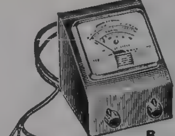
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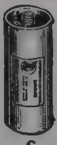
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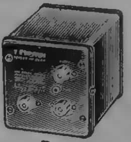
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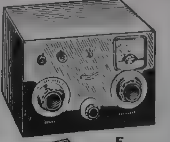
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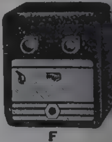
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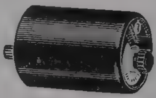
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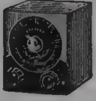
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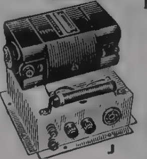
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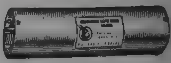
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NEW VIKING "MATCHSTICK" VERTICAL ANTENNA (FIG. A)

A pre-tuned, multi-band vertical antenna system with remote, motor-drive from transmitter location. Bandswitching 80 thru 10 meters. Pre-tuned at factory, unit keeps SWR at less than 2 to 1 on all bands; low vertical radiation angle for DX. Installs easily on roof top or in limited space location. Weatherproof aluminum cabinet at base of antenna protects network. Vertical mast is 2" dia., hard-temper aluminum tubing; sections separated by steatite insulators. **Impedance:** 52 ohms. Supplied with nine dacron guy ropes (will not affect field pattern) and complete installation and operation instructions. Shipping Weight, 38 lbs.

Johnson No. 137-102 "Matchstick"—Less transmission line, 6-conductor control cable and ground radial wire. Net Each.................................. **$129.50**

NEW DIRECTIONAL COUPLER (FIG. C) AND INDICATOR (FIG. B)

Together, these units provide constant monitoring of transmission line SWR and relative power for proper adjustment of transmitter and antenna systems. **COUPLER** installs permanently in 52-ohm coaxial line; handles up to maximum legal power as specified by FCC. Tip jacks, provided, permit use of a commercial multimeter as an indicating instrument—reference sheets supplied with each coupler for most multimeter basic ranges. **INDICATOR** consists of 0-100 microammeter calibrated in SWR and relative power, selectable by switch on front panel. Another switch permits easy adjustment and calibration of the meter. **Frequency Range:** 1.7 to 150 mc. **Power Handling Capacity:** 1000 watts RF. **Coupler Housing:** Etched aluminum 2 5/16" dia. x 6¼" long. Shipping Weight, 2 lbs. **Indicator Housing:** Sloping panel, metal cabinet finished in gray and maroon, green nomenclature; 4" x 4⅜" x 4¼". Completely wired, tested and furnished with 6' leads, male plugs. Shipping Weight, 4 lbs.

Johnson No. 250-37 Coupler—Net Each............ **$11.75**
Johnson No. 250-38 Indicator—Net Each............ **$25.00**

NEW T-R SWITCH (FIG. D)

An automatic, electronic antenna transfer switch providing instantaneous break-in for SSB, DSB, CW or AM. Exclusive double-gated circuitry with a 6BL7 dual triode for improved receiver isolation. Gain: 2 db at 30 mc, 6 db at 3.5 mc. Will handle high peak power of new linear amplifiers; rated at 4,000 watts. Cascode circuit cuts noise. Matches impedance to most receivers 3-30 mc range; will not affect transmission line SWR. Nylon tip jack for connecting internal RF probe for oscilloscope or other monitoring device. **Power Required:** 105-125 v. AC, 50-60 cps single phase, 40 watts. **Connectors:** Three SO-239 coaxials for receiver, transmitter and antenna. **Cabinet:** Copper plated steel finished gray with maroon lettering; 4 3/16" x 4⅜" x 5 5/16". Shipping Weight, 5 lbs.

Johnson No. 250-39 T-R Switch—Wired and tested; with tube and power supply. Net Each.............. **$27.75**

"MATCHBOXES" WITH BUILT-IN DIRECTIONAL COUPLER AND INDICATOR (FIG. E)

Antenna matching and switching systems for transmitters. Provide a constant monitor of transmission line incident or reflected power. Unique balanced high "Q" tuned circuit and careful shielding provide more than 20 db of additional harmonic suppression. Bandswitching 80, 40, 20, 15 and 10 m: Front panel controlled. With directional coupler and built-in directional coupler indicator; matches balanced and unbalanced loads over a wide range of antenna impedances. Will tune out large amounts of reactance. No coils to change; no load-tapping. Equipped with a self-contained heavy duty change-over relay which permits separate matching of the antenna to the receiver and mutes the receiver while transmitting. Provision for RF probe. Shipping Weight: 250-23-3, 13 lbs.; 250-30-3, 28 lbs.

Johnson No.	Watts	Imp. Ohms Balanced	Imp. Ohms Unbalanced	Size, Inches W. x D. x H.	Net Each
250-23-3	275	25-1500	25-3000	9⅞ x 10½ x 7	$ 86.50
250-30-3	1000	50-1500	50-2000	17¼ x 12⅛ x 10⅞	149.50

Standard "Matchboxes" No. 250-23 (275 w.), Net **$54.95.** No. 250-30 (1 kw), Net **$124.50.** Both less coupler and indicator.

MODEL 250-25 "SIGNAL SENTRY" (FIG. F)

RF actuated monitor for phone or CW. Non-freq. sensitive, triggered directly by transmitter RF. Plugs into receiver, headphone jack. Headphones plug directly into monitor. Size: 3⅞" x 3⅝" x 3¾". Complete with tubes (1-12AX7, 1-12AU7), wires, less power supply. Shipping Weight, 3 lbs.

Johnson No. 250-25 Signal Sentry—Net Each........ **$22.00**

LOW PASS FILTERS (FIG. G)

Four individually shielded sections. Handles at least 1 kw RF Cut-off freq. 54 mc. M-derived end sections. Filter works effectively in 52-ohm transmission line, or in 52-ohm link line between transmitter and antenna coupler, such as the "Matchbox". 2¼ diameter x 9" long. Shipping Weight, 3 lbs.

Johnson No. 250-20 Low Pass Filter—Net Each...... **$14.95**
Johnson No. 250-35 Low Pass-Filter—Same as above except for 72-ohm line. Net Each............................**$14.95**

MODEL 250-26 "WHIPLOAD-6" (FIG. H)

Bandswitching mobile antenna loading coil. Provides high efficiency base loading with instant coverage on six amateur bands Large diameter airwound coil, dial scale for accurate reset. Extremely high "Q". Fiberglas housing. Mounts on whip. Size 5" x 4" dia. Shipping Weight, 3 lbs.

Johnson No. 250-26 Antenna Loading Coil—Net Each. **$16.95**

MODEL 240-152 "MOBILE VFO" (FIG. I)

Very compact 4" x 4¼" x 5" VFO designed specifically for mobile use. Ceramic insulated coils, trimmers and switches. Edge-lighted lucite dial calibrated to all bands 75 through 10 meters. Requires 5.7-6.9 v. DC at .45 amp., or 11.4-13.8 v. DC at .25 amp. and 250-300 volts at 20 ma unregulated. Kit includes all parts, hardware, instructions. With tubes. Size: 4" x 4½" x 5". Shipping Weight, 4 lbs.

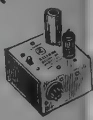
Johnson No. 240-152 Viking Mobile VFO Kit—Net Ea. **$33.95**
Johnson No. 240-152-2 Mobile VFO—Wired and tested. 6 volt model. Net Each..............................**$52.50**
Johnson No. 240-152-12—12 volt, wired and tested. Net **52.50**

DYNAMOTOR POWER SUPPLIES (FIG. J)

DC rating 500 volts, 200 ma, intermittent. Supplies plate voltage for all stages of Viking Mobile; maximum PA input approx. 5 watts. Supplied with basic power and control connectors required for the Mobile. Completely wired and assembled. 6 volt primary input. 6⅛" high, 7¼" deep, 7⅛" wide.

Johnson No. 239-102 Power Supply—6-volt. Net Ea... **$98.50**
Johnson No. 239-101 6 Volt Base Kit—Accomodates PE-103 Carter and others. Net Each.......................**$19.6**

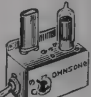
MODEL 250-40 MODULATOR



Compact plug-in speech amplifier/screen modulator provides phone operation for the Viking "Adventurer". High gain; may be used with either crystal or dynamic mike. Simple installation requires only minor wiring changes in "Adventurer". Plugs directly into rear socket on "Adventurer" chassis; draws power from same. With 1-12AX7 and 1-12AU7. Size: 4 3/16" w. x 4¾" h. x 4" d. Shipping Weight, 1 lb.

Johnson No. 250-40 Modulator—Net Ea. **$12.25**

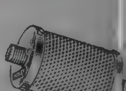
MODEL 250-28 100 KC CALIBRATOR



Compact calibrator with accurate 100 kc check points to 55 mc for calibrating receivers and VFO's or monitoring transmitter signal. Hermetically sealed military type crystal Adjustable ceramic trimmer for exact zero beating. Requires 6.3 v. at .15 amp. and 150-300 v. at 2 ma. Special clips for connecting tube prongs to equipment furnishing power. Power cable and extension leads permit remote mounting of switch. Completely wired and tested with one 6BH6 tube and crystal. Size: 1⅝" x 2½" x 1½" overall height to top of tube, 3⅜". Shipping Wt., 1 lb.

Johnson No. 250-28 Calibrator—Net Each.......... **$17.95**

MODEL 250-29 POWER REDUCER



A shielded power reducer for 100-150 watt transmitters, such as the Johnson Viking, Collins 32V or others, permitting them to serve as exciters for the Johnson Kilowatt Power Amplifier. When connected between the transmitter output and the RF input of the Viking Kilowatt it absorbs approximately 25% of the exciter power and permits normal exciter tuning and loading. (Also improves driver regulation). Completely shielded to prevent harmonic radiation, unit is equipped with SO 239 coaxial connectors at input and output. Power dissipating resistors are high stability, low inductance units. Dimensions: 3½" long, 2¼" diameter. Shipping Weight, 1 lb.

Johnson No. 250-29 Reducer—Net Each............ **$13.95**

E. F. Johnson Amateur Gear

AMATEUR ACCESSORIES

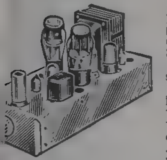
"6N2" VFO

Designed to replace 8 to 9 mc crystals in frequency multiplying 6 and 2 meter transmitters, including types using overtone oscillators Temperature compensated and exceptionally stable; uses a 6BH6 series tuned oscillator and an OA2 voltage regulator. Rigid, double-bearing, ceramic insulated, tuning capacitor, insulated air dielectric trimmers, and a ceramic coil form, plus an extra heavy aluminum cabinet and chassis minimize frequency shift due to external shock or vibration. An adjustable, special
rential, temperature-compensating circuit permits adjustments
ninimum drift. Output frequency range, 7.995-9.010 mc. band-
ched. Plexiglas dial calibrated from 144 to 148 mc, 50 to 51.5
51.5 to 53 mc, 53 to 54 mc. 10:1 vernier tuning. **Power Re-**
ements: 250-300 v. DC, at 10 ma; 6.3 v. AC at 0.3 amp.
: 4″ w. x 4½″ d. x 5″ h. **Weight:** Net, 2 lbs.; shipping, 3 lbs.

nson No. 240-133-1 Kit—
Each **$34.95**

nson No. 240-133-2—Wired, calibrated, tested. Net. **$54.95**

10-WATT AUDIO AMPLIFIER

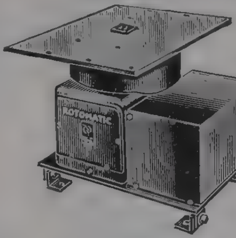


Self-contained speech amplifier, complete with power supply. **Three Inputs:** High gain, high-Z for crystal or dynamic mike; high-Z input requiring 85 mv (approx.) for use with remote mike amplifier or low-level speech system: unbalanced 680 ohm line. Single gain control for both high-Z inputs. Control circuit for push-to-talk operation, if used, is routed through from mike input to output connectors. Output transformer feeds 500 ohm line or modulator grids directly. Audio filter limits range to
0 cps; clipping adjustable up to 20 db. **Power:** Output, 10
ts; source, 105-120 v. AC, 50-60 cps, sin. ph. **Audio Require-**
nts: Mike input, 1.4 mv; second high-Z input, 85 mv; 680-ohm
it, 0.25 v. **Tubes:** 1-12AX7, 2-6AL5, 1-12AT7, 2-6B4G,
X5. Shipped complete with tubes. (With cover) 8″ x 5⅜″ x
″. Shipping Weight, 22 lbs.

nson No. 250-33-1 Kit—Net Each **$73.50**

nson No. 250-33-2—Wired and tested. Net Each . . . **$99.50**

IMPROVED "ROTOMATIC" ANTENNA ROTATOR



This rugged, all-weather rotator will safely support heavy multiple arrays weighing several hundred pounds, even under icing conditions or high wind loading. A new high-torque, series-type gear motor, with over three times the output torque of previous models, insures operation in all environments to better than 20° below zero. Desk-top remote control box with unique, easy-to-operate, automatic position-seeking control system provides positive fingertip control, assuring accurate azimuth bearing at all times. Simply set the pointer to the desired antenna position. Rotator assembly housed in sturdy aluminum casting. Rotating table is 5⁄16″ steel; tilt-type base plate is ¼″ steel. Oversized worm gears have a ratio of 12,000:1, providing smooth 1 rpm rotation. Rotator hinged to tilt 90° for beam adjustment. Mounting area required, 11″ x 14″. Power, 115 v. AC, 50-60 cps.

Johnson No. 138-116 "Rotomatic" Antenna Rotator
—With limit switches for 370° rotation. Net Each . . . **$354.00**

Johnson No. 138-108 Beam Switching Relay—Net Ea. . **$22.00**

Johnson No. 144-16 8-Conductor Cable—Net per foot. **.26**

NEW PRE-TUNED BEAM ANTENNAS (NOT ILL.)

Rugged antennas with balun matching sections; for 20, 15, and 10 meter operation. Provide approx. 9.0 db gain over tuned dipole; greater than 27 db front-to-back ratio with low SWR. Unidirectional pattern; beam width 55°. Boom assemblies of 2″ galvanized steel tubing; aluminum alloy tubing elements. Pre-tuned at factory; no adjustments required, no loading devices for flutter dampening or corona discharge needed. Complete with 3 elements, boom and balun.

Johnson No. 138-420-3—20 Meter Beam with 20′ boom. Net Each **$139.50**

Johnson No. 138-415-3—15 Meter Beam with 13′ 7″ boom. Net Each **$110.00**

Johnson No. 138-410-3—10 Meter Beam with 10′ boom. Net Each **$79.50**

OTHER ACCESSORIES STILL AVAILABLE

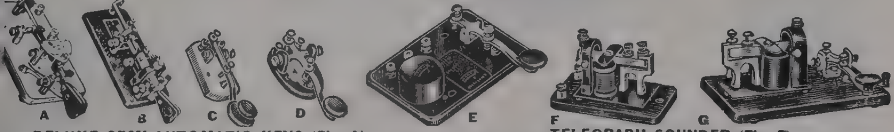
nson No. 250-22 Bi-Net—Dual loading antenna network for
nd 20 meter mobile units. Net Each **$10.95**

nson No. 250-34 Power Divider—Wired. Net Each. **25.50**

Johnson No. 250-36 Modification Kit—Converts "6N2" Transmitter for use with Viking I and Viking II. Net Each **$2.50**

Johnson No. 23.1116 Ranger Key Modification Kit—Net **7.50**

KEYS AND PRACTICE SETS



DELUXE SEMI-AUTOMATIC KEYS (Fig. A)

 adjustments with lock nuts; smooth, easy action, adjustable
 lowest to highest speed; arm, posts, switch and all machine
s heavily chrome plated; heavy brass connector strips under
 insure low-resistance circuit; 2 maroon plastic paddles can be
isted to correct height; aligned and free-acting vibrator bear-
. Heavy steel base, 6¼″ x 3½″ x ½″; four rubber feet. Com-
e with switch and adjustable weight.

nson No. 114-500—⅛″ contacts; black wrinkle. Net **$17.95**

nson No. 114-501—¼″ contacts; chrome plated. Net **$20.65**

CIAL MODEL 114-520 SEMI-AUTOMATIC KEY (Fig. B)

 design provides professional quality at moderate cost. Uses
ily chromed vibrator arm assembly as deluxe models and has
parate adjustments to enable smooth operation at speed.
udes auxiliary circuit closing switch, cast metal base,
bber feet and adjustable keying lever. Net Each **$13.95**

HIGH SPEED STANDARD KEYS (NOT ILL.)

merly available from Signal Electric Co. Spring tension, con-
 spacing, bearings adjustable. Brass base and binding posts.
quer finished. Platinor contacts .072″ diameter.

nson No. 114-100—R48 Key without switch. Net Each **$5.95**

nson No. 114-100-3—M100 Key with switch. Net Ea **$6.85**

HEAVY DUTY KEYS (Fig. C)

-cast base, chrome plated arm, heavy brass connector strips.
ustable steel bearings. ¼″ coin silver contacts.

nson No. 114-320—Black wrinkle enamel base. Net . . **$4.70**

nson No. 114-321—Polished chrome plated base. Net **$5.85**

STANDARD KEYS (Fig. D)

vy die-cast base, smooth, adjustable bearings. Provision for
ging in semi-automatic keys. Contacts are of ⅛″ coin silver.

nson No. 114-310—Black wrinkle, no switch. Net Ea. **$3.10**

nson No. 114-310-3—Black wrinkle, with switch. Net. **3.90**

nson No. 114-311—Chrome plated, no switch. Net Ea. **5.20**

nson No. 114-311-3—Chrome plated, with switch. Net. **6.10**

PRACTICE SET (Fig. E)

stant frequency buzzer and key on a 4″ x 6″ molded bakelite
. Use singly or in pairs for code practice.

nson No. 114-450—Practice Set. Net Each **$4.90**

nson No. 114-400—Constant Frequency Buzzer only. Fully
stable, coin silver contacts. Uses 2 dry cells or C bat-
. Net Each **$1.85**

TELEGRAPH SOUNDER (Fig. F)

Designed for instant response, this brass sounder provides a clear, resonant tone that can be easily read. Steel bar frame, black enamel finish. Brass bridge and adjustment screws. Sounder plate is black lacquered steel. Mahogany finished wood base, brass binding posts, and rubber mounting feet.

Johnson No. 114-112—Sounder (4 ohms). Net Each **$9.95**

Johnson No. 114-113—Sounder (20 ohms). Net Each . . **$10.45**

LEARNER SET (Fig. G)

The ideal telegraph practice set for learners. Steel bar frame with a brass bridge and brass adjustment screws provide strength and corrosion-resistance with maximum conductivity. Sounding bar is brass while sounder plate is steel, black lacquered. Adjustable key arm, brass finished. Mahogany finished wood base, brass binding posts, and rubber mounting feet.

Johnson No. 114-110—(4 ohms). Net Each **$14.95**

Johnson No. 114-111 –(20 ohms). Net Each **$15.45**

PRACTICE KEY (NOT ILL.)

Inexpensive key for beginners. All metal parts except base are nickel plated. Adjustable key arm, spring and smooth action bearings. ⅛″ coin silver contacts. Molded phenolic base.

Johnson No. 114-300—Practice Key. Net Each **$2.25**

PHENOLIC BASE KEY (NOT ILL.)

Adjustable bearings, improved spring-pig-tail connection. ⅛″ coin silver contacts. Nickel plated, no switch.

Johnson No. 114-301—Beginners' Black Phenolic Key. Net Each **$2.50**

CORD AND WEDGE (NOT ILL.)

Universally used by railroad telegraphers; ideal for amateur service where both hand keys and semi-automatics are used. Permits easy attachment of semi-automatic key across circuit closing switch of a standard hand key.

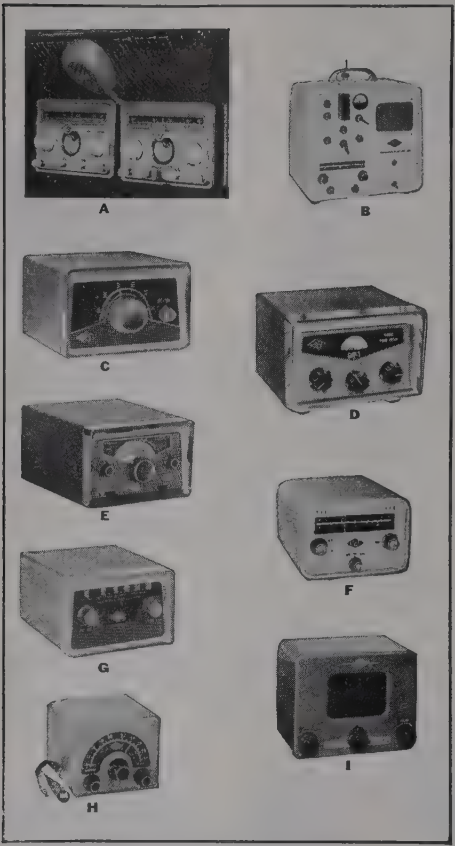
Johnson No. 114-380—Net Each **$1.15**

PONY RELAY (NOT ILL.)

Polished, plated steel armature; other metal parts are brass with lacquer finish. Non-adjustable magnets. Cast iron black enamel base; mahogany finish sub-base. Rated 20 ohms.

Johnson No. 114-105—Net Each **$13.80**

Mobile Amateur Equipment



MOBILE RECEIVER MODEL G-66B (FIG. A)

Meets every mobile requirement: Phone, CW, SSB. Operates on 6 v. DC, 12 v. DC or 115 v. AC with equal excellence of performance. Covers six bands including broadcast: 540-2000 kc, 3500-4000 kc, 7000-7300 kc, 14000-14350 kc, 21000-21450 kc, and 28000-29700 kc. Offers double conversion for high image rejection sharp skirt selectivity, a BFO with VR and adjustable pitch control, an automatic noise limiter, antenna trimmer, "S" meter, phone jack, 8 tubes and a 3-watt audio output. **Size:** 6½" w. x 9" d. x 4½" w. Shpg. Wt., 12 lbs.

Model 3046 (G-66B) Receiver—Net Each.......... $209.50

Model 3069 Universal Power Supply and Speaker—Specify 6 v. DC with 115 v. AC, or 12 v. DC with 115 v. AC when ordering. **Size:** 6½" w. x 4¾" d. x 4½" h. Shpg. Wt., 9 lbs. Net Each.................................... $49.50

Model 3098 "Thin-Pack" Power Supply—12 v. DC only. Less speaker. **Size:** 6½" w. x 2¾" d. x 4½" h. Shpg. Wt., 6 lbs. Net Each.................................... $29.50

MOBILE TRANSMITTER MODEL G-77A (FIG. A)

Identical in size and appearance to its companion, the G-66B Receiver (see above). **Frequency:** 80-40-20-15-10 meters, VFO controlled (crystal control optional). Driver-multiplier stages ganged with oscillator for single-knob exciter control. Modulator employs integral speech clipping. Drum dial exposes only band in use. **Power Input:** 50-60 watts, mod.; provisions for CW. Pi-network output circuit. No heavy duty relay required; full press-to-talk, built-in antenna relay. The heavy-duty vibrator power supply features low current drain on both standby and transmit. Operates on 6 v. DC, 12 v. DC or 115 v. AC; 500-600 v. output at full load. Silicon rectifiers. Includes power supply modulator and installation kit. Shipping Weight, 42 lbs.

Model 3203—Net Each.......................... $299.00

GONSET "COMMUNICATOR III" (FIG. B)

Meet amateur, C-D, C.A.P., commercial, and industrial needs. Each is a complete station . . . superhet receiver with low-noise X155 in cascode RF, crystal-controlled transmitter, power supply for 6 v. DC. 12 v. DC, and 115 v. AC. **Frequency Range:** 49-54 mc (6 meter models), 144-148.3 mc (2 meter models), 220-225 mc (1¼ meter models). Delivers 5-7 watts carrier. Tuning meter for both transmitter and receiver, panel controls for all tunable ci cuits, facilities for 6 crystals, adjustable squelch. Antenna, 1 whip, with provision for 52 ohm or open-line connection. VFO ar other accessories available. Write for details. **Size:** 11" w. x 8½ d. x 10⅛" h. Shipping Weight, 30 lbs.

Model 3136—6 meter. **Model 3133**—2 meter. Less mike and crystal. Net Each.................... $289.5

Model 3139-GA—Ground to air. Complete with mike, one crysta canvas carrying bag. **Size:** 11" w. x 8¼" d. x 10⅛" h. Shipping Weight, 30 lbs. Net Each.................. $379.0

Model 3211—2 meter. **Model 3212**—6 meter linear amplifier f Communicator III series. Increases output power to 50-60 watt Comes in matching cabinet. For 115 v. AC only. **Size:** 11" w. x 11" h. x 10¼" d. Shpg. Wt., 31 lbs. Net Each. $169.5

O.C.D.M. 2 AND 6 METER "COMMUNICATORS" (FIG. B

Basically a VHF transmitter-receiver unit, completely self-co tained; requires only an antenna, power source and micropho Operates on car battery or 115 v. AC. **Receiver:** Superhet wi Cascode RF, 3-IF stages. Six meter model has double conversio covers 49-54 mc; two meter model covers 144-148.3 mc. Both hav noise clipper, adjustable squelch for silent standby, pilot light, o off switch, and earphone jack with speaker muting contact. Mod lator can be used for emergency PA. **Transmitter:** Provid 6 crystal controlled frequencies through a selector switch. Us 2E26 output tube delivering 6 watts of carrier with AM modul tion. Supplied complete with tubes, mike, one crystal, canv carrying case. Operates on 6 v. DC, 12 v. DC, or 115 v. A Specify end-operating frequency when ordering.

Model 3133-CD—2-meter. **Model 3136-CD**—6-meter. **Size:** 1 w. x 8¼" d. x 10⅛" h. Shipping Weight, 30 lbs. Net Each.. $329.5

Model 3211-CD—2-meter linear amplifier. **Model 3212-CD**- 6-meter linear amplifier. **Size:** 11" w. x 11" d. x 10¼" h. Shp Wt., 31 lbs. Net Each............................$209.5

Model 3230-CD—2-meter package includes Model 3133-CD Com municator and Model 3211-CD amplifier. **Size:** 22" w. x 19¼" x 20⅜" h. Shpg. Wt., 61 lbs. Net Each.............$539.0

Model 3231-CD—6-meter package of 3136-CD and 3212-C amplifier. **Size:** 22" w. x 19¼" d. x 20⅜" h. Shpg. Wt., 61 lb Net Each..$539.0

NEW SIX METER CONVERTER (FIG. C)

Provides excellent 6-meter reception when operated in conjuncti with conventional auto broadcast receivers. May also be used wi communications or broadcast-type home receivers. Full-visio calibrated dial for easy tuning. Switch provides for 6- or 12-vo filaments. Gonset noise clipper is built in for connection receivers without such provisions. Compact design is simp to install.

Model 3275—Net Each.......................... $69.5

NEW HYBRID BALANCED PHONE PATCH (FIG. D)

Ideal patch between amateur station transmitting/receivi equipment and telephone circuits. Adjustable hybrid balanci permits optimum balance for any particular set of condition Panel meter shows balance; switchable to show line level und patch conditions to avoid overload and crosstalk. No pow required. **Size:** 6" w. x 6¼" d. x 4½" h.

Model 3273—Net Each.......................... $44.5

"SUPER 12" CONVERTER MODEL 3261 (FIG. E)

Covers amateur 10-11-15-20-40 and 75 meter phone bands wi adequate band spread. Also has 19 and 49 meter BC band covera for casual listening. Very high sensitivity using 8-foot whip a tenna. Separate BC antenna input. Low drift, noise factor a image response. Hi-Z antenna switch on 40 and 75. A.V.C. on- switch. Requires only 12-volt auto ignition for power supply; internal connections to auto receiver required. **Size:** 6⅛" 7⅞" d. x 4" h. Shpg. Wt., 5 lbs.

Model 3261 Converter—Net Each.................. $69.5

MODEL 3226 VFO FOR "COMMUNICATOR III" (FIG. F)

Compact, stable VFO for 2- or 6-meter Communicator III mode Both bands on slide rule dial; selected by panel switch. "Sp ting" switch provided. Built-in 115 v. AC power supply; actua by the Communicator. **Tubes:** 2-6B16, 1-OB2. Alpine whi enamel finish. **Size:** 6½" w. x 8½" d. x 5" h. Shipping Weig 9 lbs.

Model 3226 VFO—Net Each....................... $69.5

MOBILE FM TUNERS (FIG. G)

Compact units provide sensitive and stable FM reception wh used in conjunction with automobile receivers. Squelch and noi suppression assures static-free response. Low voltage operatio Two controls: AM-FM switch and tuning with lock-in circuit f accuracy. Easy installation with plug-in connection to the au radio; clip-on power lead. For 12-volt negative ground igniti systems only. **Size:** 6⅛" w. x 7⅞" d. x 4" h. Shipping Weig 5 lbs.

Model 3247—30-40 mc operation. Net Each.......... $89.5

Model 3251—40-50 mc operation. Net Each..........$89.5

Model 3311—88-108 mc (standard broadcast band). Net 99.9

MARINE CONVERTER MODEL 3163 (FIG. H)

Designed for 12-volt ignition systems and ideally suited for hybr transistorized radios. Plugs into auto radio receptacle for ea installation; alligator clip connects to ignition; simple anten connection. Unit covers 1.6 to 3.0 mc range for police, mari weather, ship-to-ship, ship-to-shore, coast guard, time signals a amateur broadcasts. **Size:** 4¼" w. x 4¼" d. x 3¼" h. Shippi Weight, 3 lbs.

Model 3163—Net Each.......................... $29.5

MONITONE OSCILLATOR-MONITOR MODEL 3022 (FIG.

For use as code practice oscillator or as a monitor for phone a C.W. transmitters. Operates on 115 v. AC. Neither key nor pho "hot" to ground when used for code. Can also monitor spe quality of radiotelephone transmitter. **Size:** 7" w. x 6" d. x 6" Shpg. Wt., 4 lbs.

Model 3022—Net Each.......................... $29.5

GONSET Mobile Equipment, Antennas

AMATEUR COMMUNICATOR, RECEIVERS, AMPLIFIER AND ACCESSORIES

10-METER COMMUNICATOR MODEL G-28

gh performance station includes receiver, transmitter and power pply in single package. Husky, 50-watt transmitter has pi-net-rk output, calibrated VFO, optional crystal control, VFO spot-g and switchable amplifier grid, plate current or modulator plate rent meter. Sensitive 10-meter receiver uses double conversion 28-29.7 mc coverage; features full-vision dial, vernier tuning ve, adjustable squelch, noise limiter, "S" meter and panel-unted speaker. Power supply is built-in for heavy duty 115 v. operation. **Size:** 13″ wide, 12½″ deep, 7½″ high. Shipping ight, 35 lbs.

odel 3204 (G-28) Communicator—Net Each..... $299.50

odel 3221 (G-50) Communicator—Same, but for 6-meter band eration. Net Each.................................. $319.50

ALL-BAND RECEIVER MODEL G-43

mpact unit utilizes printed circuitry for high sensitivity, extra ectivity and peak reception. Easy tuning 0.54 to 30 mc in 6 ads with drum dial and widespread calibration as well as log-g scale. Selectivity, 6 kc at −6 db; 24 kc at 60 db. Special ibration on band six for use with VHF converters. Controls lude main tuning, bandspread tuning bandswitch, audio vol-e, antenna trimmer, sensitivity, ANL on-off, crystal calibrator off, phone-CW switch, standby receive switch, signal strength ter. Provision for internal crystal calibrator accessory. Built-in aker, jack for headphones or external speaker. Muting con-tions. **Size:** 16¼″ wide, 10½″ deep, 8″ high.

del 3241 (G-43) Receiver—Net Each............ $159.50

ALL-BAND RECEIVER MODEL G-33

ilar to Model G-43, but has 4 bands (0.54-43 mc) plus logging le by bandspread tuning on single dial. Calibrated scales for ateur bands. Improved reception and high selectivity. Con-ls include main tuning, bandspread tuning, bandswitch, audio ume, antenna trimmer, sensitivity and function selector. Built-speaker and jack for headphones or external speaker. **Size:** 4″ wide, 10½″ deep, 8″ high.

del G-33 Receiver—Net Each.:................... $89.95

SSB TRANSMITTER MODEL GSB-100

mplete SSB transmitter for 80, 40, 20, 15, 11 and 10-meter ads in 600 kc ranges. Rated 100 watts on single-tone PEP or . May be used as an exciter for a higher powered linear ampli-. Transmits selectable sidebands, phase modulation, AM (both bands are transmitted), and CW with excellent keying char-eristics. Effective VOX for cut-off when receiving. Filter-phas-network for excellent rejection and carrier suppression to more n 60 db. Built-in VFO and quartz crystal for low-drift control. lt-in 115 v. AC, 60 cps power supply is heavy-duty type. Con-ls include VFO tuning, function selector, bandswitch, VOX-nual-spot-standby switch, driver tuning, final tuning, output ling, VOX level, AT level, on-off-spot level, mike gain, carrier rtion and meter switch. **Size:** 24″ wide, 17″ deep, 15″ high. g. Wt., 40 lbs.

del 3233 (GSB-100) Transmitter—Net Each..... $479.50

SSB LINEAR AMPLIFIER MODEL GSB-101

unded grid, linear amplifier is rated 1,000 watts peak input. igned to operate with Model GSB-100 or similar SSB trans-ters supplying 75 to 100 watts. Self-contained design with er supply, pi-network output and antenna changeover relay. dswitched operation on 80, 40, 20, 15, 11, and 10 meters.

del GSB-101 Amplifier— Each................................ $439.50

G-28
G-43
GSB-100
GSB-101

STEERING POST MOUNTING BRACKET MODEL 3006

Universal, for all models of earlier Gonset converters (not for new converters shown on this page). Mount on either right or left hand side of steering post. Complete with mounting straps and hardware. Not illustrated.

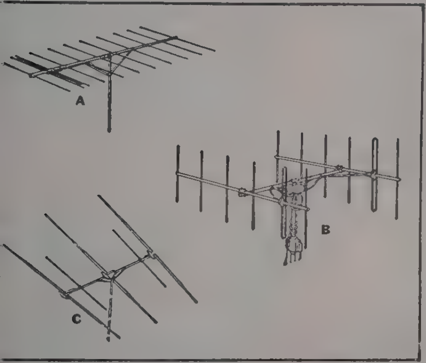
Model 3006—Net Each.................................. $4.50

NOISE CLIPPER MODEL C (NOT ILLUS.)

Original Gonset Noise Clipper. Easily installed on any receiver having conventional diode second detector circuits. Complete instructions supplied, ready to attach. **Size:** 2⅛″ w. x 4″ d. x 1½″ h. Shpg. Wt., 1 lb.

Model 3001—Net Each.................................. $9.95

AMATEUR COMMUNICATION ANTENNAS



CIVIL DEFENSE ANTENNA KITS (NOT ILLUS.)

und Plane Antenna Kits—Complete kit includes ground ne antenna, 50 ft. coax cable, two PL-259 fittings, 8 ft. mast clamp, base mounting, guys and hardware.

del 3091—For 2-meter operation. Net Each........ $29.50

del 3095—For 6-meter operation. Net Each........ $39.50

nt-to-Point Beam Antenna Kit—For 2-meter operation; in-les deluxe "Twin Six" beam, 50 ft. of coax, two PL-259 fit-s. Mast not supplied. Shpg. Wt., 22 lbs.

del 3092—Net Each.................................. $52.50

NEW 10-ELEMENT, 6-METER YAGI (FIG. A)

Sturdy beam antenna yields more than 12.6 db forward gain; makes 50 watts approach a kilowatt of power. Rugged construction: light but rigid; won't sag or droop. Can be rotated by any heavy-duty TV rotator. Tripole driven element provides excellent match. Usable frequency range: 50-54 mc. Front-to-back ratio: 29 db minimum, at optimum height.

Model 3282—Ten-element, six-meter Yagi. Net Each.. $27.50

"TWIN SIX" 2-METER BEAM (FIG. B)

A rugged, quickly assembled dual Yagi array providing well over 10 db gain and front-to-back ratio throughout the 2-meter band. (Referred to a matched, resonant ½-wave dipole). Designed for use with a 52-ohm line. Extremely low standing-wave ratio and electrical symmetry obtained through use of special balun and matching networks. ¾-wavelength between bay spacing assures optimum gain, reduced spurious lobes when vertical polarization is used. Recommended for horizontal use; may be converted to vertical use by adding 5′ T-assembly (boom and mast section), which is included. Shpg. Wt., 22 lbs.

Model 1560-V—Deluxe model with balun, matching harness, rain shield junction box. Net Each........... $36.25

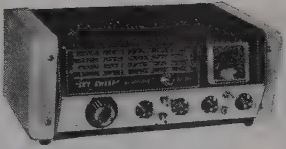
"THREE-BANDER" BEAM ANTENNAS (FIG. C)

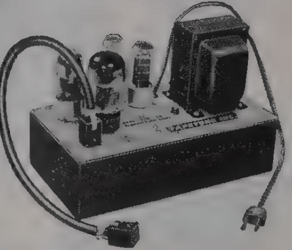
Two and three element, full-length beams for high gain, superior performance on 10, 15 and 20 meters. Multiple sleeve, concentric elements eliminate coils. Quick, easy assembly. All elements, including 10-meter parasitic, are factory cut to correct length. No tuning required for 20-meters; simple adjustment for 10 and 15-meter driven elements. Forward gain, 8 db on 3-element model; 4.9 to 5.3 db on 2-element model. Typical VSWR, 1.4 to 1. Units fed by single RG8/U cable. Shpg. Wt., 75 lbs. for 3-element, 50 lbs. for 2-element.

Model 3219—Two-element "Three-Bander". Net Each. $84.50

Model 3220—Three-element "Three-Bander". Net Ea. $124.50

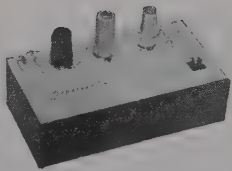
Tapetone Receivers, Converters


Model 345


Model PSR-150

Model TC-220

Model XC-50


Model XC-144

MODEL 345 "SKY SWEEP" SIX-METER RECEIVER

Single conversion receiver made by frequency conversion specialists. Features high frequency IF, crystal lattice filter and low noise filter. No secondary image.

Noise Figure: Less than 3.6 db (0.5 mv signal produces 10 db signal to noise ratio).

Coverage: 49.0-54.0 mc on long linear slide rule dial with smooth inertia tuning. Dial calibrated for 6, 2, 1¼ and ¾ meter bands.

Bandwidth: 3.5 kc at 6 db; 12.5 kc at 60 db. Bandpass flat to ±0.5 db for 30 kc bandwidth.

Rejection: −60 db, image; −70 db, other spurious signals.

Other Features: Supplies power for 2, 1¼ and ¾ meter converters when used. Linear detector supplied for SSB and CW with AVC on or off.

Model 345—Net Each $279.95

Model TC-220-6—Converter. 49-54 mc. Net Each **$84.95**

MODEL PSR-150 REGULATED CONVERTER POWER SUPPLY

A converter power supply that is capable of years of service. A ruggedized tubes; intermittent shorts will not damage the supply. Consists of a heavy duty power transformer followed by 5Y3WGT full-wave rectifier. Voltage control tube, 6SJ7WG feeds the OA3 regulator tube, controlling the output voltage o the 6Y6WGA. Cadmium plated chassis.

Output Voltage: 150 v. DC, regulated.

Maximum Current Load: 70 ma.

Filament Voltage: 6.3 v. at 1.5 amp.

Regulation: Less than 0.5% for line voltage from 105-125 v.

Ripple: Less than 0.1%.

Power Required: 28 watts, 117 v., 50-60 cps, AC.

Tubes: 5Y3GWT, 6SJ7WGT, 6Y6WGA, OA3.

Size: 9½" w. x 5" d. x 6" h. Weight, 7 lbs.

Model PSR-150—Completely wired and tested. Net Each $49.95

Model PST-150K—Kit form. Net Each **$39.95**

SERIES TC-220 CONVERTERS

Power Gain: 30 db.

Noise Figure: 3.5 db.

Rejection: Better than 60 db, image frequency; better than 70 db other spurious responses; better than 80 db, signals at intermediate frequency.

Input Impedance: 50 ohms.

Output Impedance: 50 ohms.

Power Required: 6.3 v. at 1.3 amps; plus, 150 v. DC at 50 ma an 108 v. DC at 10 ma regulated (Model TC-220-6); or plus, 150 v DC at 60 ma regulated (other models).

Tubes: 2-6CB6, 12AT7, 417A/5842.

Size: 9½" x 5" x 2½", shielded base; max. tube and shield 2¼" h

Model TC-220-G—20-25 mc IF tuning range. Net Each $84.95

Model TC-220-N—30-35 mc for National NC-300. Net. . **$84.95**

Model TC-220-6—49-54 mc for "Sky-Sweep" receiver. Net **84.95**

SERIES XC-50 SIX-METER CONVERTERS

Power Gain: 2000 (33 db).

RF Gain Control: Provided to reduce mixer overloading.

Noise Figure: 4 db; 0.1 microvolt will produce a 2:1 signal-to-nois ratio when used with a 5 kc IF bandwidth.

Rejection: −90 db, image; −80 db, IF; −80 db all other spuriou responses.

Power Required: 6.3 volts at 1.2 amps; plus, 150 volts DC at 3 ma regulated.

Tubes: 2-6BQ7A, 6CB6, 12AT7.

Model XC-50—14-18 mc IF tuning range. Net Each... $64.95

Model XC-51—10-14 mc IF tuning range. Net Each... **$64.95**

Model XC-50-N—30.5-34.5 mc IF tuning range. Net... **64.95**

Model XC-50-C4—28-30 mc IF with dual crystal oscillator an toggle switch. Net Each **$69.95**

SERIES XC-144 TWO-METER CONVERTERS

Power Gain: 2000 (33 db).

Noise Figure: 2.8 db; .085 μv will produce a 2:1 signal-to-noi ratio when used with a 5 kc IF bandwidth.

Rejection: −60 db, image; −80 db, IF; −80 db on all othe spurious responses.

Power Required: 6.3 volts at 1.3 amps; plus, 150 volts DC at 6 ma regulated.

Tubes: 417A/5842, 6BQ7A, 6CB6, 12AT7.

Model XC-144—14-18 mc IF tuning range. Net Each.. $84.95

Model XC-144N—30.5-34.5 mc IF tuning range. Net Ea **$84.95**

Model XC-144-C4—28-30 mc IF with dual crystal oscillator a toggle switch. Net Each **$89.95**

432X-598

HEATHKIT®

AMATEUR RADIO

Everything for the radio amateur in top quality mobile or fixed station ham facilities.

ATHKIT KL-1

NEW "CHIPPEWA" KILOWATT LINEAR AMPLIFIER KIT

Put the ultimate "punch" in your amateur rig. The Chippewa KL-1 is designed to operate at maximum legal amateur power inputs in SSB, CW or AM service using any one of the popular SSB, CW and AM exciters as a driver. Featured are Class AB1 and Class C operation on 80 through 10 meters; centrifugal blower tube cooling; continuously variable loading capacitor for smooth, easy loading; tuned and swamped grid circuits to accommodate any exciter power level; and extensive TVI shielding. Use with the KS-1, or equivalent power supplies. Shpg. Wt. 70 lbs.

Heathkit KL-1 .... **$501.95**

ATHKIT KS-1

KILOWATT POWER SUPPLY KIT

Supplies the necessary plate power for most RF amplifiers in medium to high power class. Will power a 2KW P.E.P. linear amplifier or a complete plate modulated kilowatt phone rig. Features an oil-filled hermetically sealed plate transformer for minimum corona effects, and a swinging choke in the filter circuit for good regulation. A 60-second time delay relay assures adequate heating of the mercury vapor rectifiers before application of plate voltage.

Maximum DC power output: 1500 watts. **Nominal voltage output:** 1500 or 3000 volts. **Maximum DC current output:** Average 500 ma, peak 1000 ma. Shpg. Wt. 105 lbs.

Heathkit KS-1 .... **$209.75**

ATHKIT VHF-1

"SENECA" VHF HAM TRANSMITTER KIT

Perfect for the General, Technician, or Novice class ham to extend transmission into VHF. A completely self-contained 6 and 2 meter transmitter, the VHF-1 features up to 120 watts input on phone and 140 watts on CW in the 6 meter band. (Slightly reduced in the 2 meter band). Controlled carrier phone operation, band switching, built-in VFO for both 6 and 2 meters, and four, switch-selected, crystal positions are provided. Features complete RF shielding, two power supplies, five radio frequency stages and two dual-triode audio stages. 50-72 ohm coaxial output. Shpg. Wt. 59 lbs.

Heathkit VHF-1 .... **$195.95**

ATHKIT DX-100B

PHONE AND CW TRANSMITTER KIT

Combines modern styling and circuit ingenuity to offer you top performance at an economical price. Provides phone or CW operation on all amateur bands from 160 through 10 meters. Featured are a built-in VFO, plate modulation, power supply, complete RF shielding and 50-72 ohm pi network output coupling. RF output is in excess of 100 watts on phone and 120 watts on CW. A pair of 6126 tubes in parallel are used in the output stage modulated by a pair of 1625's. Chassis is punched to accept sideband adapter modifications. A truly great performer for the low price. Shpg. Wt. 107 lbs.

Heathkit DX-100B **$234.50**

EATH COMPANY
TON HARBOR, MICHIGAN
A Subsidiary of Daystrom, Inc.

COMPLETE MOBIL

HEATHKIT TX-1

"APACHE" HAM TRANSMITTER KIT

Tops in the line of quality Heathkit Ham transmitters.

SPECIFICATIONS—Power input: 150 w PHONE, 180 w CW. **Output impedance:** 50-72 ohms (non-reactive). **Output coupling:** Pi Network (coaxial). **Operation:** Crystal-VFO, CW-SSB-PHONE (time sequence keying, SSB requires external adapter). **Band coverage:** 80, 40, 20, 15, 10. **Audio output:** 100 watts at 300-3000 cycle (Adjustable low-level speech clipping; 500 ohm output available). **Tube complement—Power section:** 2 selenium rectifiers, 5V4 low voltage rectifier, 2-5R4GY HV rectifier, OA2 voltage regulator, 2-OB2 voltage regulators. **Audio section:** 12AX7 speech amplifier, 12AU7 clipper amplifier, 6AL5 clipper, 12BY7 audio driver, 2-6CA7/EL34 modulator. **RF section:** 6AU6 VFO, 6CL6 crystal oscillator-buffer, 5763 driver, 2-6146 parallel power amplifier, 6AQ5 clamp. **Power requirements:** 115 V AC, 50-60 cycles. **Standby (AM, CW):** 150 watts. **Standby (SSB):** 230 watts. **CW:** 420 watts (intermittent). **Phone:** 500 watts (peak). **SSB:** 500 watts (peak). **Cabinet size:** 19½" W. x 11⅝" H. x 16" D.

Heathkit TX-1 .... **$275.00**

HEATHKIT RX-1

"MOHAWK" HAM RECEIVER KIT

Featuring a completely preassembled, wired and aligned front end coil-bandswitch assembly for ease of construction and top performance, the RX-1 is a fifteen tube double conversion superheterodyne receiver with selectable sideband.

First IF frequency: 1682 kc. **Second IF frequency:** 50 kc. **Band coverage:** 160-10 meters. (an extra band is also included, calibrated to cover 6 and 2 meters using the Heathkit SC-6 and SC-2 six and two meter converters). **Selectivity range:** 5 kc, 3 kc, 2 kc, 1 kc, .5 kc. **Bridged T notch filter:** 50 db rejection notch. **Panel controls:** RF Gain Tuning, IF Gain Antenna Trimmer, AF Gain w/on-off Switch Calibrate Set, T Notch Tuning Calibrate On, T Notch Depth CW-SSB-AM, ANL Receive-Standby, AVC Upper-Lower Sideband, BFO Selectivity, Band Phones. **Tube complement:** 6BZ6 RF Amplifier, 6CS6 First Mixer, 12AT7 Oscillator-cathode Follower, 6BA6 1682 kc IF amplifier, 6CS6 Second Mixer, 12AT7 1632-1732 kc crystal Oscillator, 6BA6 50 kc IF amplifier, 6BJ7 DET-AVC-ANL, 6CS6 Product Detector, 12AT7 First Audio S Meter Amp., 6AQ5 Audio Output, 6BA6 100 kc Oscillator, OA2 Voltage Regulator, 5V4 Rectifier. **Signal to noise ratio:** 10 db at less than 1 microvolt input. **Power required:** 117 V AC 50/60 cycle. **Cabinet size:** 19½" W. x 11⅝" H. x 16" D. Shpg. Wt. 66 lbs.

Heathkit RX-1 .... **$319.95**

HEATHKIT SB-10

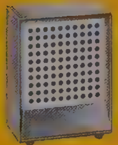
SINGLE SIDEBAND ADAPTER KIT

A compatible plug-in adapter unit for the TX-1 "Apache" Transmitter, the SB-10 lets you operate on SSB at minimum cost, yet does not affect the normal AM and CW functions of the transmitter. The critical audio phase shift network is supplied completely preassembled and wired in a sealed plug-in unit. Less than 3 watts RF excitation is required at fundamental frequencies. Produces either a USB, LSB or DSB signal, with or without carrier insertion. Covers 80, 40, 20, 15 and 10 meter bands. Built-in electronic voice control with anti-trip circuit is provided. Shpg. Wt. 12 lbs.

Heathkit SB-10 .... **$108.95**

MODIFICATION KIT: Modifies DX-100 and DX-100-B for use with the SB-10 Single Sideband Adapter. Shpg. Wt. 1 lb.

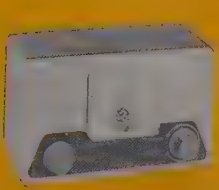
Model MK-1 .... **$11.95**


HEATHKIT AK-5

ACCESSORY SPEAKER KIT

Styled to match the "Mohawk" Receiver. Features heavy duty 8" speaker, 8 ohm impedance, 4.7 oz. magnet. Housed in attractive ⅜" plywood cabinet with perforated metal grille. Shpg. Wt. 7 lbs.

Heathkit AK-5 .... **$12.95**


HEATHKIT AM-2

REFLECTED POWER METER KIT

Requires no external power for operation and may be left in the antenna system feed line to measure percentage of reflected powe or standing wave ratio from 1:1 to 3:1. Handles peak power of wel over 1 kilowatt and covers 160 through 6 meters. Input and outpu impedance provided for 50 or 75 ohm lines. Shpg. Wt. 3 lbs.

Heathkit AM-2 .... **$19.95**

East

ED STATION GEAR

RID DIP METER KIT

eful in ham shacks, as well as service shops, the GD-1B can be ed either as an oscillator or absorption wave meter. Align IF ges, traps and filters, and use it in coil winding applications. phone jack is provided for listening to "zero beat". Prewound ug-in coils provide continuous frequency coverage from 2 mc 250 mc. Shpg. Wt. 4 lbs.

athkit GD-1B **$26.50**

DITIONAL PLUG-IN COILS: 2 extra coils extend frequency cover- to 350 mc. Shpg. Wt. 1 lb.

del No. 341-A.............................. **$3.95**

RANSISTOR CODE PRACTICE OSCILLATOR KIT

far your best buy in a high quality code oscillator, the CO-1 is al for Boy Scouts or beginning radio hams. Practice code by thentic CW tone or blinker light. Switch selects built-in speaker light. Contactor provided for practice keying, or standard key be connected. Completely transistorized for long battery life. wered by two standard flashlight batteries included with the kit. sy to build and compact in size the CO-1 is housed in an attrac- black bakelite case measuring only 6" x 3" x 2½". Shpg. . 3 lbs.

athkit CO-1 .... **$9.75**

MMUNICATIONS-TYPE ALL-BAND RECEIVER KIT

ten in on ham band and short wave conversations. Covers kc to 30 mc in four bands. Power supply is transformer oper- d for safety and efficiency. Features include: Bandswitch, band- ead tuning, phone-standby-CW (BFO) switch, headphone k, antenna trimmer, noise limiter, RF gain control and AF trol. Shpg. Wt. 12 lbs.

athkit AR-3 .... **$36.95**

BINET: Optional extra. Shpg. Wt. 5 lbs.

del No. 91-15A.............................. **$6.95**

ONE AND CW TRANSMITTER KIT

vides both phone and CW operation on 80, 40, 20, 15 and 10 ters. A single 6146 tube in the final amplifier stage provides full watt plate power input on CW or controlled carrier modulation ks up to 60 watts for phone operation. Features built-in modu- or and power supply, single knob bandswitching and pi net- k output circuit. Shpg. Wt. 25 lbs.

athkit DX-40 .... **$79.95**

IETER CONVERTER KIT

op quality crystal controlled converter designed to extend erage of the "Mohawk" Receiver to the 2-meter band. May be used with receivers tuning a 4 mc segment between 22 and mc when appropriate crystal is used. Calibration accuracy is ured through the use of a .005% 3rd overtone crystal.

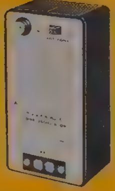
athkit XC-2 .... **$44.75**

IETER CONVERTER KIT

ends operation of the "Mohawk" and most general coverage eivers into the 6 meter band. The 3-tube circuit provides two es of RF amplification and a low-noise triode mixer. Features ystal controlled oscillator and provision for external RF gain trol to prevent overload or cross modulation from extremely ng signals. Input frequency 50-54 mc. Output frequency 6 mc. Shpg. Wt. 6 lbs.

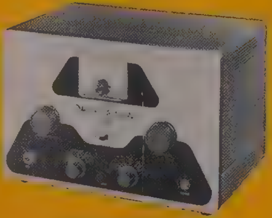
thkit XC-6 .... **$32.75**

HEATHKIT GD-1B

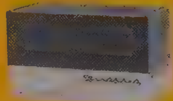


HEATHKIT CO-1

HEATHKIT AR-3



HEATHKIT DX-40



HEATHKIT XC-2

HEATHKIT XC-6

"CHEYENNE" MOBILE HAM TRANSMITTER KIT

Provides up to 90 watts on phone or CW and covers 80, 40, 20, 15 and 10 meters. Features built-in VFO, controlled carrier modulator, four RF stages, with a 6156 final amplifier and pi network (coaxial) output coupling. Designed to be powered by the Heathkit MP-1 Mobile Power Supply. Mounting holes in cabinet are provided on sides, top and bottom for bolting to the MR-1 Receiver cabinet in any position. A spotting switch allows tuning without going on the air. Push-to-talk microphone supplied. Convert to fixed station operation in minutes using the Heathkit UT-1 AC power supply. Handsome gray and gray-green cabinet measures 6⅛" H. x 12½" W. x 10" D. Shpg. Wt. 22 lbs.

Heathkit MT-1 .... $121.50

"COMANCHE" MOBILE HAM RECEIVER KIT

A stable 8-tube superheterodyne ham band receiver operating on AM, CW and SSB, on the 80, 40, 20, 15 and 10 meter amateur bands. Circuit includes an RF stage, converter, two IF stages, two detectors, noise limiter, two audio stages and a voltage regulator. Oscillators are voltage regulated and temperature-compensated for high stability. A companion to the "Cheyenne" Transmitter, the Comanche is designed to operate from a 12 volt car battery through the Heathkit MP-1 Mobile Power Supply. Converts in minutes to a fixed station unit with the UT-1 AC Power Supply. Shpg. Wt. 19 lbs.

Heathkit MR-1 .... $146.00

UTILITY AC POWER SUPPLY KIT

Heathkit UT-1, Shpg. Wt. 15 lbs. $35.75

MOBILE POWER SUPPLY KIT

Heathkit MP-1, Shpg. Wt. 8 lbs. $54.75

MOBILE SPEAKER KIT

Heathkit AK-7, Shpg. Wt. 4 lbs. $7.50

POWER METER KIT

Heathkit PM-2, Shpg. Wt. 2 lbs. $15.95

MOBILE BASE MOUNT KIT

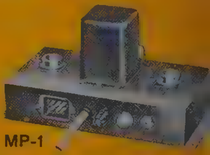
Heathkit AK-6, Shpg. Wt. 5 lbs. $6.25

harvey
radio company, inc.
103 west 43rd street · new york city

HEATHKIT MT-1

HEATHKIT MR-1

HEATHKIT U



HEATHKIT MP-1

HEATHKIT A

HEATHKIT PM-2

HEATHKIT A

HEATHKIT

HEATH COMPAN
BENTON HARBOR, MICHI

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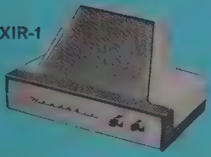
GENERAL PRODUCTS

FOR HOME AND INDUSTRY
FOR IN AND OUT-OF-DOORS
FOR WORK AND LEISURE TIME ACTIVITY
. . . THERE'S A HEATHKIT DESIGNED FOR YOU!

HEATHKIT XI-1

ATHKIT XIR-1



TRANSISTOR INTERCOM KIT

Master unit can call any one, any combination, or all five remote stations. Remote stations can turn system "on" and call another. Each Remote unit equipped with "privacy" switch. Master unit can be connected to new transistor clock-radio shown below (or any radio not AC-DC operated) to supply music or alarm to system; can also be used for "baby sitting"; separate listen and talk volume controls. Beautifully styled in high-impact plastic, Master and Remote stations are similar, the Remote being a miniature of the master. Both have two-piece cases in ivory and turquoise colors. Designed for easy construction and high performance, Master has all transistor circuit for long life, instant operation and low battery drain. Power supply uses 8 size "C" flashlight batteries for up to 300 hours of normal "on" time. Master and remotes sold separately; order up to five remote stations for each master station ordered. Batteries not included.

Heathkit XI-1 (Master). Shpg. Wt. 6 lbs. $33.95
Heathkit XIR-1 (Remote). Shpg. Wt. 4 lbs. $8.50

INTERCOM AC POWER SUPPLY

For permanent installation of the XI-1 Intercom. Converts 110 V AC to well filtered 12 volt DC output. Fits in space normally occupied by battery supply.

Heathkit XP-1 . . . . $12.25

HEATHKIT TCR-1

del No. 93-3

TRANSISTOR CLOCK RADIO KIT

A clock radio that not only has the features found in the most expensive models on the market, but is completely portable (battery powered radio *and* clock), and completely transistorized. Lulls you to sleep, wakes you up, gives you the correct time, works like a regular radio, like an alarm clock (or combination of both), and can serve as a music or alarm source for the new Transistor Intercom shown above. Front panel contains clock and radio dial, "lull-to-sleep" control, "automatic-off-on" switch, "buzzer alarm" and "volume control". Vernier tuning control on the radio dial gives precise station settings. "Lull-to-sleep" controls allow up to 60 minutes playing time, after which the radio automatically shuts off. Radio or alarm turns on automatically at the time for which "alarm set" hand on clock is set. An earphone jack is provided for "private" listening; with earphone plugged-in, radio speaker is silenced. Six-transistor, superheterodyne circuit features pre-aligned IF's for simplicity of assembly. Tuned IF stage and double tuned IF input transformer assure top performance, noise-free operation. Built-in rod-type antenna brings in distant stations with clarity and full volume; 4" x 6" speaker gives "big set" tone quality. Completely portable, receiver operates up to 500 hours from six standard penlight size mercury batteries; clock operates up to 5 months from a single battery of the same type; ordinary penlight cells also may be used. Cabinet is of impact-resistant plastic in turquoise and ivory, only 3½" high, 8" wide and 7½" deep. The TCR-1 is equally useful at home, on the beach, in a boat, or on auto trips . . . wherever you are, you'll find "YOUR CUE" clock-radio your constant companion. Shpg. Wt. 5 lbs.

Heathkit TCR-1 . . . . $55.50

LEATHER CARRYING CASE: Shpg. Wt. 2 lbs.

Model No. 93-3. . . . . $5.95

EATH COMPANY
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HEATHKIT XR-1L

HEATHKIT XR-1P

6 TRANSISTOR PORTABLE RADIO KIT

Easy to build . . . offers fun and enjoyment wherever you go. 4" x 6" PM speaker with heavy magnet provides "big set" tone quality. Powered by six standard size "D" flashlight cells for extremely long battery life (between 500 and 1000 hours). Roomy chassis adds greatly to ease of assembly. Transformers are pre-aligned. Peak performance is easily accomplished with slight touch-up in alignment using a radio station as reference. Receiver has built-in rod-type antenna for reception in all locations. Modern, molded plastic case with pull-out carrying handle and fully enclosed back add beauty and convenience to this splendid kit. Cabinet, in two-tone blue molded plastic, with gold inlay measures 9" long, 7" high and 3¾" deep. Shpg. Wt. 6 lbs.

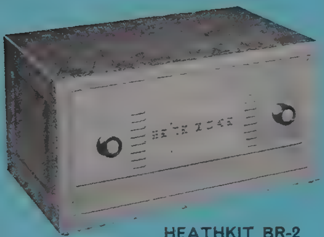
Heathkit XR-1P	**$36.95**

LEATHER CASE MODEL: Identical to XR-1P except with leather case, instead of plastic. Leather carrying strap included. Shpg. Wt. 7 lbs.

Heathkit XR-1L	**$42.95**

LEATHER CASE: Can be purchased separately. Fits all XR-1P's and earlier XR-1 models. Shpg. Wt. 3 lbs.

Model No. 93 1	**$8.95**



HEATHKIT BR-2

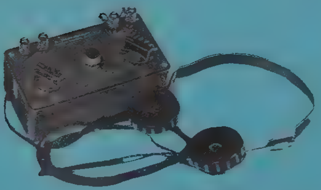
BROADCAST BAND RADIO KIT

Fun to build and a fine receiver for your home. Covers frequencies from 550 to 1600 kc with excellent sensitivity and selectivity. The 5½" PM speaker, hi-gain IF transformers, miniature tubes and rod-type antenna assure good reception in all locations. It is easy to build, and the manual explains operational theory as work progresses. The specially prepared construction manual represents a basic radio education course in itself and is of particular value to novices and students. Shpg. Wt. 10 lbs.

Heathkit BR-2	**$23.50**

CABINET: Optional extra. Measures 11½" wide, 5¾" high and 6¼" deep. Shpg. Wt. 5 lbs.

Model No. 91-9A	**$6.95**

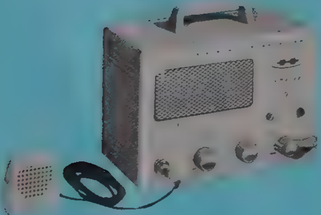


HEATHKIT CR-1

CRYSTAL RADIO KIT

An interesting "do-it-yourself" project for all ages. Teaches you the fundamentals of radio reception and provides local station radio entertainment as well. Requires no external power. Shpg. Wt. 3 lbs.

Heathkit CR-1	**$9.95**



HEATHKIT CB-1 (kit)
HEATHKIT W-CB-1 (wired)

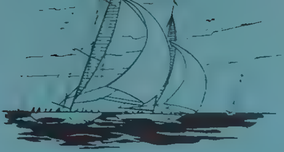
CITIZENS BAND TRANSCEIVER KIT

Have your own communications system! Make necessary personal contacts with family, friends, or associates from your car, home, boat or office. Light, compact, easy to use, the transceiver reliably covers distances from one to ten miles depending on location, antenna and type of installation. Transmitter frequency is crystal controlled. Receiver tunes any of the 23 assigned channels. Operates from 117 volt AC line using internal power supply, or from battery using separate vibrator supply. Can be transferred in minutes from fixed to mobile operation. All pertinent FCC regulations, amendments and station license application forms are furnished. Transceiver comes complete with microphone, two power cords, station identification card to fit metal frame at end of cabinet, adhesive-back letters and numbers to affix call letters in space on front panel, and crystal for one channel. Smartly styled cabinet blends harmoniously into surroundings of home, office, auto or boat. Cabinet, handle, knobs and speaker grille are in rich "mocha" color with pleasantly contrasting "beige" front panel and microphone. (See antenna and mobile power supply accessories at bottom of opposite page.) Shpg. Wt. 10 lbs.

Heathkit CB-1 (kit model)	**$51.95**
Heathkit W-CB-1 (wired model)	**$69.95**

East

PERFORMANCE



BAND TRANSISTOR RADIO DIRECTION INDER KIT

oat owners everywhere will thrill to the beauty and performance this useful marine kit. Plot your position easily using either arine beacons or standard broadcast stations. Six transistors owered by six standard flashlight batteries operate this cometely portable radio direction finder. Covering the maritime and ronautical bands from 200 to 400 kc and broadcast bands from 40 to 1620 kc, the DF-2 takes directional "fixes" on aircraft radio avigation stations, marine beacons and standard broadcast transitters as well as providing weather information and the entertainent of a high quality transistor portable radio. The receiver emoys separate RF and audio gain controls ("sensitivity" and olume") and includes a panel-mounted meter which indicates oper "tuning" and "null" points. The "bearing" control knob the front panel rotates the ferrite-loop antenna. Flashlight tteries last up to a year on an intermittent service basis. Shpg. t. 9 lbs.

eathkit DF-2 .... $84.50

HEATHKIT DF-2

RANSISTOR RADIO DIRECTION FINDER KIT

self-contained, six transistor radio receiver operating on the ndard broadcast band (540 to 1600 kc), the DF-1 takes direcnal "fixes" on broadcast transmitters and provides portable dio entertainment. Powered by a single 9-volt battery; spare ttery included with kit. Shpg. Wt. 5 lbs.

eathkit DF-1 .... $66.50

HEATHKIT DF-1

ARINE CONVERTER-CHARGER KIT

eep your marine batteries fully charged at all times. Plugged into ore power, the MC-1 provides up to 20 amperes continuously charging 6 volt storage batteries or up to 10 amperes continusly for charging 12 volt batteries. No moving parts, tubes nor owers to wear out or break. Shpg. Wt. 16 lbs.

athkit MC-1 .... $49.50

HEATHKIT MC-1

TIZENS BAND TRANSCEIVER ACCESSORIES

DEL CBU-1 "UTILITY" ANTENNA: Low cost antenna for temrary installations, mobile or fixed, where maximum coverage not required. 45½" base-loaded antenna with 12′ connecting bles comes complete, ready to use. Shpg. Wt. 3 lbs.

athkit CBU-1 .... $11.95

DEL CBM-1 "MOBILE" ANTENNA: For permanent mobile instalions where greatest coverage is desired. Double chain-type mper mount spring base. Ideal for boats, etc. Kit is complete th 2-section, 9′ quarter-wave whip, 15′ connecting cable and rdware. Shpg. Wt. 7 lbs.

athkit CBM-1 .... $24.45

DEL CBF-1 "FIXED LOCATION" ANTENNA: Quarter-wave round plane" type antenna, ideal for use between fixed and bile units. Measures 9′4″ from bottom of mounting bracket to of vertical radiator. 50′ connecting cable and mounting clamp. pg. Wt. 7 lbs.

athkit CBF-1 .... $24.45

RED & KIT FORM POWER SUPPLIES R MOBILE USE

6 volt batteries:

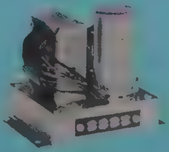
Kit Model VP-1-6; Shpg. Wt. 4 lbs.................. $9.95

Wired Model WVP-1-6; Shpg. Wt. 4 lbs............ $13.95

12 volt batteries:

Kit Model VP-1-12; Shpg. Wt. 4 lbs................ $9.95

Wired Model WVP-1-12; Shpg. Wt. 4 lbs.......... $13.95



HEATHKIT VIBRATOR POWER SUPPLY

ces

RUDDER POSITION INDICATOR KIT

Operates on your 6 or 12 volt marine battery and shows at a glance the position of your rudder at all times. Indicator calibrated 60° port and starboard from dead ahead. 20′ cable included with kit. Simple to assemble, takes only minutes to install. Shpg. Wt. 4 lbs.

Heathkit RI-1 .... $18.50

MARINE BATTERY CHARGE INDICATOR KIT

See at a glance the approximate percentage of charge in your boat batteries. Checks from one to eight storage batteries. Operates on 6, 8, 12 or 32 volt battery systems. (NOTE: for mounting on non-ferrous metals or wood only). Also useful in service stations or other applications where banks of storage batteries are in constant use. Shpg. Wt. 3 lbs.

Heathkit CI-1 .... $21.95

POWER METER KIT

Samples the RF field of marine, mobile or fixed transmitters. Operates on any transmitter having output frequency between 100 kc and 250 mc, regardless of power. Requires no batteries, electricity nor direct connection to the transmitter. A simple and inexpensive way to continuously check transmitter output. Shpg. Wt. 2 lbs.

Heathkit PM-1 .... $17.95

12-VOLT POWER CONVERTER KIT

Changes direct current from your 12 volt marine battery to nominal 117 volt, 60 cycle, current. Operates your radio, electric razor, lights, etc. directly from your boat or car battery. Power rating 125 watts. (Not recommended for electric motors or transmitters.) Shpg. Wt. 8 lbs.

Heathkit PC-1 .... $29.95

ELECTRONIC TACHOMETER KIT

Operating directly from the spark impulse of an engine, the TI-1 may be used on any spark-ignited two or four cycle engine with any number of cylinders. Operates on 6, 8, 12, 24 or 32 volt DC system and is completely transistorized. Reads RPM from 500 to 6000. Shpg. Wt. 4 lbs.

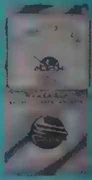
Heathkit TI-1 .... $31.95

FUEL VAPOR DETECTOR KIT

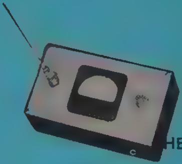
Guard against dangerous bilge fumes with this sensitive instrument. Warns you at a glance of the presence of fumes in your bilge on a three-color "safe-dangerous" meter. Pilot light shows if detector is operating. Kit is complete including neoprene insulated cable and spare detector unit. Shpg. Wt. 4 lbs.

Heathkit FD-1 .... $43.50

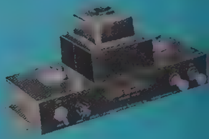
HEATHKIT RI-1



HEATHKIT CI-1

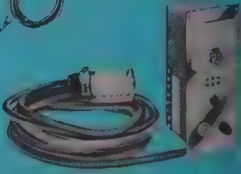


HEATHKIT PM-1



HEATHKIT PC-1

HEATHKIT TI-1



HEATHKIT FD-1

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harvey
radio company, inc.
103 west 43rd street · new york city

HEATHKIT

HEATH COMPANY
BENTON HARBOR, MICHIGA
A Subsidiary of Daystrom, Inc.

RME

COMMUNICATIONS EQUIPMENT

V MODEL 6900 COMMUNICATIONS RECEIVER

RME 6900 is the product of almost 30 years of high-frequency communications
ver engineering. Designed for the serious amateur engaged in SSB, AM and/or CW
ition, it covers five amateur bands: 80, 40, 20, 15, and 10, plus a 10-11 mc band.
slide rule dial shows only band in use. Adjustable threshold noise limiter is very
ive on AM-CW and SSB. Separate SSB detector, 1 microvolt sensitivity. Image
nse down at least 55 db all bands; .01% drift. Smooth running weighted knob
:1 geared tuning control with overriding clutch) provide "professional feel" tuning.
tivity: 500 cycles, 2 kc and 3.5 kc plus 62.5 kc Q multiplier. Continuously selectable
channel ±3 kc. Double conversion. Logging dial permits instantaneous respotting
y frequency.

features improved fast-attack delayed AVC circuit, horizontal "S" meter, variable
injection for weak signal CW reception; 500 and 4-ohm output; 100 kc crystal cali-
r; selectable sideband. Controls: Tuning, RF Gain and on/off switch, Audio Gain,
nna Trimmer, Band Selector, Stand-by/receive/calibrate/transmit, Noise Limiter
shold, Calibrate Adjust, Q Multiplier Frequency, Q Multiplier Null/Peak/Off, Mode
tor: Upper Sideband/Lower Sideband/AM/CW, Notch Depth, Peak Height. Tubes:
RF Amplifier, 6U8 1st Converter, 6U8 2nd Converter, 6BZ6 2.195 kc IF, 6U8 3rd
erter, 6BA6 62.5 kc IF, 6T8 Am Det./1st Audio/AVC, 6BJ8 Noise Clipper, 12AT7
uct Detector, 12AX7 Q Multipler, 6AQ5 Audio Output, 6CB6 Crystal Calibrator,
Panel is vinyl bonded to aluminum for a lifetime finish of attractive gray and
coal. Weight 30 lbs. Net Each.. **$349.00**

6900

V MODEL 4303 TRANSCEIVER

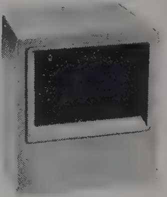
l-held, portable, completely transistorized, requires no license to operate, the 4303
oys a super-het receiver with sensitivity of better than 2 microvolts; selectivity per-
single-channel reception; operates with loudspeaker volume. Tunable over the range
.96 to 27.27 mc (all 23 of the Class D Citizens Channels); tuning may be locked.
smitter is crystal controlled; power input is 90 milliwatts. Includes 7 high-gain
istors and 1 diode. 2N588 Receiver Mixer, 2N371 Receiver Local Osc., 2N373 1st
N373 2nd IF, 1N295 Diode-Detector, 2N591 1st Audio (used for transmitting and
ving), 2N270 Audio Output (Modulator when transmitting), 3552A Transmitter
Uses 2 Burgess Z4 or Eveready 724 batteries (not supplied); life: 60 hours (4 hours'
er day, 10% transmitting time). Controls: On/off, Audio Gain, Receiver Tuning,
-to-talk. 34" whip antenna retracts into case. Size: 2" x 3" x 9". Weight (with bat-
s), 2½ lbs. Net Each.. **$99.50**

4350A

DEL 4350A DUAL-CONVERSION RECEIVER

gned specifically for communications on amateur frequencies, the Model 4350A is a
al-controlled dual-conversion receiver covering seven bands: 160, 80, 40, 20, 15, 10
meters. Features differential, ball planetary tuning knob with 75-to-1 and 1-to-1
s. 1st IF 2195 kc, 2nd IF 455 kc. Crystal filter has phasing control for variable
ion of unwanted adjacent signals. High sensitivity of 2 microvolts for 10 db signal-
ise ratio. Drift ±.01%. Extreme stability permits single sideband reception with
thout adapters. BFO injection control for accurate carrier frequency insertion of
operation.

Includes "S" meter; automatic noise limiter; front panel frequency correction con-
antenna trimmer. RF gain control with 6 db attenuation for each 5 degrees rotation;
ition function switch—MGC-BFO, AGC-AM phone, AGC-SSB, MGC-SSB. Two
al jacks provided for addition of single sideband adapter; 4-ohm speaker terminals;
na connections for doublet and Marconi-type; transmitter relay control. 100 kc
er crystal. Controls: Dual-speed tuning, AF gain, BFO pitch, BFO injection, antenna
ner, calibration adjust, band selector, RF gain—on-off, function switch, stand-by—
ve—transmit switch, crystal filter, selectivity selector, crystal filter phasing-rejector
ol. ANL on-off. Tubes: 6BZ6 RF, 6U8 1st Mixer, 6CB6 1st IF Amp, 6U8 2nd Mixer,
2nd IF Amp-BFO, 6T8 2nd Det-ANL-1st AF, 6AQ5 AF Output, 5Y3 Rect, OA2
age Regulator. 117 v. 50-60 cycle AC. Sturdy steel console-type case finished in
ctive gray. Size: 10" h. x 16½" w. x 10" d. Shpg. Wt., 36 lbs. Net Each **$249.00**
el 4302 Speaker—Speaker in case, matches 4350A design; 4-ohm impedance. Size:
. x 8½" w. x 5½" d. Shipping Weight, 6 lbs. Net Each.................. **$17.50**


4302

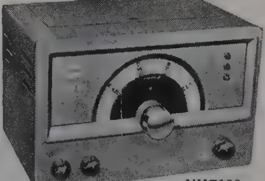
4303

DEL VHF126 VERY-HIGH-FREQUENCY CONVERTER

gned for use with any conventional communication receiver to extend its range to
1¼, 2 and 6 meters. The only tunable VHF converter on the market; works well
any receiver that will tune to 7 mc. With ranges of 48.4 to 54.2 mc, 143.4 to 149.2
nd 219.4 to 225.2 mc, MARS and CAP are covered on 2 meters and sufficient over-
n 6 meters allows listening to commercials for band openings.

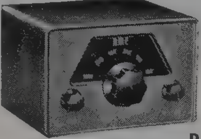
very-high frequencies are converted by the VHF126 to a fixed frequency of 7 mc; then
o the receiver, amplified and detected in a normal manner (double-conversion results
e two higher frequency ranges). On all ranges the image response is practically
nated because the output (50 mc tuner) is 7 mc and the first IF for the fixed tuned
al-controlled unit is 50 mc. The receiver will function in a normal manner. The qual-
f the converted signal will be controlled by the quality of the associated receiver;
lent performance when used with the RME 4350A receiver.

y steel cabinet and chassis, and adequate shielding minimize radiation (within FCC
s). An RME dual-speed tuning control provides fast or micrometer tuning. Noise
e, 2.5 db on 50 mc, 4.0 db on 144 db, 6.0 db on 220 mc. Sensitivity, ½ microvolt at
b signal-to-noise ratio. Frequency drift, 25 kc or less five minutes after warmup
sured on 50 mc); after 30-minute warmup random drift averages a maximum of 500
s. Calibration, direct, mc, subdivided in 100 kc divisions. Panel controls: Antenna
geover switch, band selector, tuning control, line switch. Tubes: 6BQ7A Cascode RF
50 mc, 6U8 Mixer-Cathode Follower 50 mc, 6AF4A Tuner Osc., two 6AM4 Grounded
Amp-Fixed Converter, two 6BQ7A Osc-Doubler-Fixed Converter, two 6BQ7A
er-Followers-Fixed Converter, 5Y3GT Rectifier, OA2 Voltage Reg. Gunmetal gray
. Coax antenna input for each band, coax fitting for RG58/U cable. Terminal strip
ided for receiver low-frequency antenna. Size: 16½" w., 10" d., 10" h. Shipping
ht, 32 lbs. Net Each.. **$239.00**


VHF126

DEL DB23 PRESELECTOR

oves performance of any receiver. Three 6J6 twin triodes used as neutralized push-
stages in a combination of selective and wide band RF amplifiers. Minimum gain of
through all ham bands from 3.5 to 30 mc. Signal-to-noise ratio improvement better
7.5 db over that of the receiver alone. Input circuits match any standard antenna.
-in power supply. Compact case finished in blue-gray. Size: 5" h, 7⅝" w., 6" d.
ping Weight, 6½ lbs. Net Each.. **$49.50**


DB23

DX COMPUTER

DEL KD88 HAM OPERATING TABLE KIT

ifically for amateur use, the KD88 provides an attractive, functional equipment table.
sloping top provides space for receiver, speaker, exciter, key, mike, and for writing.
-away leaf pulls out for extra equipment; front ports for call and log books. Knock-
kit form; joints are tongue-and-groove for easy, permanent assembly. Made of
ble gumwood suitable for any finish; all exposed edges are covered with grained wood
xtra-beauty; mar-proof top. Assemble with only screwdriver and hammer, with easy
by-step instructions. Size: 30" h., 54" w., 32" d. Net Each.................. **$57.50**
DX Computer—Complete Ham DX guide in handy form. Provides all information
X operators. Size: 13¼" h., 4¾" w. Net Each.. **$1.00**

KD88

Hammarlund Ham Receivers

AMATEUR, COMMERCIAL, SHORT WAVE RECEIVERS

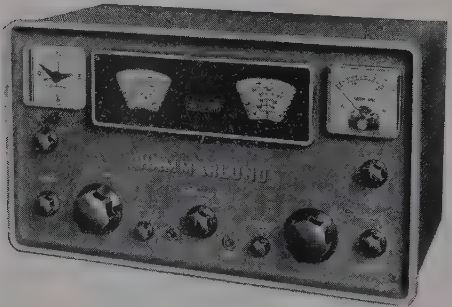
MODEL HQ-170 RECEIVER

Features: Triple conversion, 17-tube superhet circuit; separate vernier tuning, ± 3 kc for easy SSB tuning; separate linear detector for best CW and SSB reception, plus normal diode AM detection; built-in 100 kc crystal calibrator and dial scale reset; automatic audio response; combination of noise limiter and squelch; tuned IF Amplifier (seven selectivity positions provide mechanical filter type skirt selectivity). **Frequency Range:** From 1.8 to 54.0 mc in 7 meter bands. **Output Impedance:** 3.2 ohms. **AVC:** Fast-attack, delayed type; has off, slow, medium fast decay. **Selectable Sidebands:** 6 db bandwidths; upper sideband, 1-2-3 kc; lower sideband, 1-2-3 kc; both sidebands, .5-2-4-6 kc. **Sensitivity:** Average, 1.5 µf produces 10:1 noise ratio. **BFO:** Variable from zero beat ±2 kc. **Slot Filter:** Razor sharp, 1.5 kc at 6 db; adjustable ±5 kc over passband for better than 40 db attenuation; additional attenuation of 20 db at any point by slot depth control. **Controls:** Main Tuning; Vernier or Bandpass Tuning; Sensitivity (RF gain)/On-Off switch; Selectivity (0.5-1-2-3 kc per sideband); Sideband (Upper-Lower-Both); Audio Gain; Antenna Compensator; Tuning Range (Band Selector); Function Switch (AM-SSB-CW); Slot Freq. Calib.; Slot Depth; CW tone (BFO Pitch); Noise Limiter; AVC; Operation (Send-Receive-Calibrator); "S" Meter Phone Jack. Dial Scale Reset. **Rear Panel Connections:** Speaker, antennas (balanced and unbalanced), external send-receive relay jack; **Tubes:** 3-6BE6, 3-6BA6, 2-12AU7, 2-6BZ6, 1-6C4, 1-6BV8, 1-6AL5, 1-6AV6, 1-6AQ5, 1-5U4GB, 1-OB2. **Power Required:** 120 watts, 105-125 v., 50/60 cps, AC. **Cabinet:** Modern, super-ventilating type with sturdy, attractive front panel. 19″ w. x 13″ d. x 10½″ h. Shipping Weight, 45 lbs.

Hammarlund Model HQ-170 Receiver*—Net Each. **$359.00**

*Telechron clock-timer, $10.00 extra.

MODEL HQ-100 ECONOMY RECEIVER

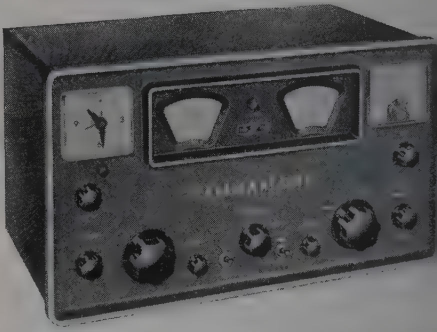


Automatic audio response and noise limiter. Superhet, 10-tube circuitry. Humanized-control organization. Warm-up timer. Extra stable, temperature compensated, high frequency oscillator. Q-Multiplier for greater selectivity. **Frequency Range:** 540 kc to 30 mc in four bands. **Bandspread:** Calibrated every 10 kc on 80, 40 and 20 meters; 20 kc on 15 meters; 50 kc on 10 meters; 0-100 arbitrary logging scale. **Audio Output:** 1.0 watt max. undistorted. **Output Impedance:** 3.2 ohms. **AVC:** Operates on RF and IF stages. **Selectivity:** One position for high quality; one for Q-Multiplier continuously variable from 100 cps to 3 kc. **Sensitivity:** 1.75 µv produces 10:1 signal-to-noise ratio. **Antenna Input:** 100 ohms nom.; compensator for various loading or balanced line. **Controls:** Tuning; Bandspread Tuning; Audio Gain; Sensitivity; Antenna Compensator; Tuning Range; On-Off and Send-Receive; Q-Multiplier; CW Tone; Limiter On-Off; "S" meter. **Rear Terminals:** Speaker, antenna, ground and phone jack. **Tubes:** 2-6BA6, 1-6BE6, 1-6BZ6, 1-6C4, 1-6AL5, 1-6AQ5, 1-12AX7, 1-OB2, 1-5Y3. **Power Required:** 68 watts, 105-125 v., 50-60 cps; also available in export voltages. **Cabinet:** Die-cast aluminum, 16¼″ w. x 9⅛″ d. x 9 7/16″ h. Shipping Weight, 30 lbs.

Hammarlund Model HQ-100 Receiver*—Net Each. **$189.00**

*Telechron clock-timer, $10.00 extra.

MODEL HQ-110 RECEIVER



Features: Dual conversion, 12-tube superhet circuit. Separa
linear detector for best SSB and CW reception. Q-Multiplier f
continuously variable selectivity. BFO for SSB and CW receptio
Crystal-controlled second conversion oscillator. Built-in 100
crystal calibrator and dial scale reset. Automatic audio respon
and noise limiter. Warm-up timer turns on set at predetermin
time. **Frequency Range:** 6, 10, 15, 20, 40, 80 and 160 meters. **Ma**
Audio Output: 1.0 watt undistorted. **Sensitivity:** Average, 1.5
produces 10:1 noise ratio. **Output Impedance:** 3.2 ohms. **Anten**
Input: 100 ohms nom.; compensator for loading various types
balance line. **AVC:** On RF and IF stages; separate, delayed AV
on RF. **BFO:** Variable from zero beat to ±4 kc. **"S" Meter:** Ca
brated in nine steps of 6 db plus scale above S-9 to +40 db. **Noi**
Limiter: Series type for minimum effect on modulation. **Contro**
Tuning, Sensitivity and On-Off, Audio Gain, Antenna Compe
sator, Band Selector, Function (Send-Receive, CW-SSB, Ca
brate), Q-Multiplier, CW Tone, Limiter On-Off, "S" Mete
MAN/AVC switch. **Rear Connections:** Speaker, antenna, groun
phone jack and external send-receive relay jack. **Tubes:** 2-6BE
2-6BZ6, 1-6AZ8, 1-6BA6, 1-6BJ7, 1-6C4, 1-6AQ5, 1-5U4G
1-OB2, 1-12AX8. **Power Required:** 80 watts, 105-125 v., 50-60 c
Cabinet: Die-cast aluminum, 16¼″ w. x 9⅛″ d. x 9 7/16″ h. Weig
30 lbs.

Hammarlund Model HQ-110 Receiver*—Net Each. **$249**

*Telechron clock-timer, $10.00 extra.

MODEL HQ-160 DELUXE RECEIVER

Features: Dual conversion, 13-tube superhet. Separate line
detector for SSB and CW. Q-Multiplier and electrical bandspre
tuning. Separate stabilized BFO is temperature-compensat
Crystal control and crystal calibrator built in. Dial scale res
Calibration every 5 kc up to 10 mc; every 10 kc beyond 10
Automatic audio response and noise limiter. Adjustable not
filter up to 60 db attenuation. Improved skirt selectivity in
tuned circuits in 455 kc IF. "S" Meter and IF output jack. **Fr**
quency Range: 540 kc to 31 mc in six bands, continuous. **Aud**
Output: 1.0 watt max., undistorted. **Sensitivity, AVC, Outp**
Impedance, Antenna Input, "S" Meter, and Noise Limiter: Sa
as listed for HQ-110, above. **BFO:** Variable from zero beat to
kc. **Controls:** Manual and BS tuning; Sensitivity; Audio Gain wi
On-Off; Antenna Compensator; Function (AVC, MAN, C
SSB); Band Selector; Phone Jack; Q-Multiplier; Slot Freq. Ca
brator On-Off; CW Tone; Slot Depth; Limiter On-Off; "S" Met
Send-Receive. **Rear Connections:** Speaker, antenna, ground, fu
send-receive relay, IF output. **Tubes:** 3-6BA6, 2-6BE6, 1-6
1-6BJ7, 1-6BZ6, 1-6U8, 1-6AQ5, 1-5U4GB, 1-OB2, 1-12A
Power Required: 100 watts, 105-125 v., 50-60 cps; available
export voltages. **Cabinet:** 19″ w. x 13″ d. x 10½″ h. Shipp
Weight, 47 lbs.

Hammarlund Model HQ-160 Receiver—Net Each.. **$379**

Hammarlund Ham Equipment

AMATEUR, COMMERCIAL, SHORT WAVE COMPONENTS

MODEL HQ-145 RECEIVER

Features: Dual conversion 10-30 mc and 20-meter bands; single conversion on 0.54-10.0 mc bands. Conveniently calibrated bandspread; dial marked every 10 kc on 80-, 40- and 20-meter bands, every 20 kc on 15-meter band, and every 50 kc on 10-meter; handy 0-100 logging scale. Antenna compensator adjusts for loading effects of various antenna types or transmission lines. Adjustable selectivity provided with 6-position control. New type noise filter provides better limiting action with minimum effect on modulation. **Frequency Range:** 0.54-30 mc plus 20-meters in 5 bands. **Maximum Audio Output:** 1.0 watt, undistorted. **Sensitivity:** 1.75 µv for 10:1 S/N ratio, average. **Output Impedance:** 3.2 ohms (EIA standard). **Antenna Input:** 100 ohms, nominal; provides for single wire or balanced line. **AVC Action:** On RF and IF stages; smooth and fast. **BFO:** Variable from 0 to ±2 kc. **Slot Filter:** ±5 kc range of center frequency has over 40 db rejection. Calibrations every 1 kc. Max. attenuation, 60 db; 8:1 vernier tuning ratio. **"S" Meter:** Calibrated 1-9 in 6 db steps, plus db scale above step 9 to +40 db. **Controls:** Main Tuning; Bandspread Tuning; Sensitivity (RF gain); Audio Gain/Power On-Off; Crystal Selectivity; Crystal Phasing; Antenna Compensator; Band Selector; Function Switch; Slot Frequency Adjust; Slot Depth; CW Tone; Noise Limiter On-Off; AVC On-Off; "S" Meter; Dial Scale Reset; and Phone Jack on front panel. Speaker Terminals, Antenna Terminals, External Send-Receive Relay Jack and "S" Meter Zero Adjust on rear. **Tubes:** 2-6BE6, 2-6BA6, 1-6BZ6, 1-6C4, 1-6AL5, 1-12AX7, 1-6AQ5, 1-OB2, 1-5U4GB. **Power Required:** 80 watts, 105-125 v. AC, 50-60 cps; 210-250 v. AC, 50-60 cps available. **Size:** 19″ w. x 13″ d. x 10½″ h. Shpg. Wt. 42 lbs.

Hammarlund Model HQ145 Receiver—Net Each... **$269.00**

Telechron Clock-Timer—Installed in above. Add to Net. **$10.00**

100 kc Crystal Calibrator—For above receiver. Net Each. **15.95**

SUPER-PRO 600 SERIES RECEIVERS

Dual conversion, 20-tube superhet for single or diversity reception. **Features:** Extra stability from .01% or better at 540 kc to less than .001% at 54 mc. Image reception down 74 db. Spurious response down at least 100 db. Selectivity for three crystal and three non-crystal filter positions is from 200 cps at narrowest to 13 kc at broadest bandwidth. Negligible radiation without cross-talk in multi-receiver installations. **Frequency Range:** Standard model, 540 kc to 54 mc in six bands. Special low-frequency model, 100-400 kc and 1.35 to 29.7 mc in six bands. **Audio Output:** 2.0 watts max. undistorted. **Sensitivity:** 0.75 to 1.0 µv on CW and 1.50 to 2.3 µv on AM for 10 db signal-to-noise ratio. **Double Conversion:** On 7.4 mc to 54.0 mc. **Vernier Log Scale:** 600 divisions for each band readable to 1/10 division (or 6000 readable divisions per band). **Tuning Meter:** Calibrated in db from 1 µv on AVC and from 6 mw audio output. **AVC:** Output constant within 12 db when input increases 80 db. **Output Impedance:** 600 ohms, balanced split windings; phone jack winding delivers 15 mw to 8000 ohm resistive when the audio output of the 600-ohm power load is adjusted to 500 mw. **BFO:** Variable from zero beat to ±3 kc. **Controls:** Main tuning-Vernier with dial lock; Band Selector; RF Gain, AF Gain; Selectivity; BFO Pitch; Crystal Phasing; Send-Receive; AVC-Manual. CW-Modulation; Limiter On-Off; Tuning Meter; Meter Switch; Phone Jack. **Rear Panel:** BFO injection. convenience outlet, antenna input, AVC-Detector diode output, AF amplifier outlet, IF output, AF meter adjustment and RF meter adjustment. **Tubes:** 7-6BA6, 3-6C4, 1-6AC7, 2-6BE6, 3-6AL5, 1-12AU7, 1-6V6GT, 1-5R4GY, 1-OA2. **Power Required:** 130 watts, 1.25 amps at 117 v.; line ratings, 95, 105, 117, 130, 190, 210, 234, and 260 v. taps, 50-60 cps; 25-60 cps also available. **Size:** Cabinet model, 21½″ w. x 12¾″ h. x 17¼″ d. (Weight, 87½ lbs.); rack model, 19″ w. x 16½″ d. x 10½″ h. (Weight, 66 lbs.).

Hammarlund Model SP-600-JX—Standard model with cabinet. Net Each........................ **$1140.00**

Hammarlund Model SP-600-JLX—Low-frequency model with cabinet. Net Each............................ **$1260.00**

MODEL HC-10 CONVERTER

HC-10

Convert your present receiver to the ultimate in SSB/CW or AM/MCW reception. No special wiring; plugs into your last IF tube by a special adapter; works with any receiver with an IF between 450 kc and 500 kc. Vernier type passband tuning ±3 kc for easy SSB reception. **Selectivity:** Seven positions, 0.5 kc to 6 kc. plus notch filter for co-channel interference. **Slot Filter:** Bifilar T trap for better than 40 db attenuation; slot depth control for additional 20 db; 8:1 vernier for accuracy. **Noise Limiter/Squelch:** Series type limits on positive and negative noise pulses; squelch works on AM for both noise and squelch. **AVC:** Fast-attack, delayed type; has off, slow, medium and fast decay; external AVC voltage available from rear terminal. **Output:** 1.0 watt, undistorted. **Output Impedance:** 3.2 ohms. **Controls:** Slot Frequency; AM/MCW-CW/SSB; Passband Tuning; AVC; Slot Depth; Power-Audio Gain; Selectivity, Sideband Selector; BFO; Noise Limiter/Squelch. **Rear Terminals:** Speaker, AVC, input jack, phone jack, coarse passband adjustment, AC convenience outlet. **Tubes:** 2-6BA6, 1-6BE6, 1-6BV8, 1-12AU7, 1-6AL5, 1-6C4, 1-6AV6, 1-6AQ5, 1-5Y3. **Power Required:** 75 watts, 105-125 v., 50-60 cps. **Size:** 9¼″ w. x 7⅛″ d. x 9½″ h. Weight, 15 lbs.

Hammarlund Model HC-10 Converter—Net Each.......... **$149.00**

MATCHING SPEAKERS FOR HAMMARLUND RECEIVERS

Hammarlund Model PL-38888-G1 S-100 Matching Speaker—Extended range 6″ x 9″ speaker has full 8-watt capacity. Housed in metal cabinet 9¾″ w. x 7″ d. x 9⅝″ h. For use with HQ-110 and HQ-100. Net Each.. **$14.95**

Hammarlund Model PL-26394-G1 S-200 Matching Speaker—Matching speaker for HQ-160, HQ-170 and HQ-145 receivers. Extended range 6″ x 9″ speaker has 8-watt capacity. Housed in metal cabinet 11¼″ w. x 9″ d. x 12″ h. Shipping Weight, 12 lbs. Net Each............... **$19.95**

MATCHING SPEAKER

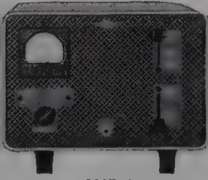
WE STOCK ALL HAMMARLUND ACCESSORIES.
JUST ORDER—OR ASK FOR—ANY ITEM.

COLLINS

SSB Amateur Equipment

NEW "S-LINE" MEDIUM PRICED SSB EQUIPMENT

32S-1



312B-4

75S-1

MODEL 32S-1 TRANSMITTER

SSB and CW transmitter with an output in the high frequency bands of 80 through 10 meters. Provides input power to drive a linear amplifier which can be added without modification of the transmitter. **Features:** VFO tunes 80 to 15 meters in fourteen 200 kc segments; crystal provides 10 meter operation; space provided for two additional crystals. Antenna loading control is factory preset for 50 ohms; adjustable for other impedances up to 2:1 SWR. Automatic load control provides a higher average output without distortion. Unit is powered by the 516F-2, or the 516F-1 with KWM-1 with adapter cable; 516E-1 DC supply may be used for mobile or portable operation. Panel meter monitors final amplifier plate current, grid current and ALC voltage. Transmitter completely shielded and bypassed for TVI reduction. **Power Output:** 100 watts, PEP into a 50-ohm load. **Frequency Range:** 80, 40, 20, 15 and 10 meters; easily retuned to frequencies outside amateur bands by using crystals. (Crystal provided for one 200 kc segment of 10 meters.) **Oscillators:** Double conversion circuit; CR18 crystals used in HF oscillator; crystal oscillator at 455 kc provides carrier for SSB generator and choice of upper or lower sideband operation; VFO tuning 2.500 to 2.700 mc provides 200 kc bands with 7.5 kc overlap at each end of a band. **Frequency Stability:** 100 cps due to temperature, humidity, pressure and voltage; calibration accuracy, 1 kc. **Spurious Radiation:** Carrier suppression, unwanted sideband, oscillator and mixer products, and second harmonic, −50 db; third order distortion, −30 db. **Keying Characteristics:** Break-in CW by operating VOX from key. **Audio Input:** High-Z mike and 600-ohm phone patch. **Audio Response:** Nominal 300-2500 cps, ±3 db. **Audio Compression:** ALC applied to IF and RF amplifier stages, capable of 10 db compression. **RF Feedback:** 10 db used around PA and driver for improved PA linearity. **Noise Level:** 40 db below one tone carrier. **Controls:** Band Selector; VFO Dial; Emission Switch (Tune-Lock Key-LSB-USB-CW); Exciter Tune; PA Tune; PA Load Control (concentric with PA tune); Mike Gain; Meter Switch (ALC, PA grid, PA plate); Frequency Control (Off, Rec VFO, Trans VFO, Sync). **Tubes:** 3-6U8A, 3-12AT7, 2-6DC6, 2-6AL5, 2-6146, 1-6AH6, 1-6AU6, 1-6CL6. **Power Required:** 320 watts AC, or 23 amps at 14 v., CW key closed; 225 watts AC or 16 amps at 14 v., SSB average speech. **Power Source:** 115 v., 50-60 cps. Power supply must furnish 800 v. DC, .20 amps; 275 v. DC, .175 amps; 6.3 v. AC, 6.0 amps.; bias adjustable between −60 and −80 volts. **Size:** 14½" w. x 11⅝" d. x 6⅛" h. Wt., 16 lbs.

Collins Model 32S-1 Transmitter—Net Each....... $590.00

MODEL 75S-1 RECEIVER

Meets the operating requirements for an efficient SSB station. In a transceiver-type station, the receiver acts as the controlling frequency generator. **Features:** High quality, precision VFO tunes 215 kc in 9 turns for smooth SSB. Provision for 500 cps and 2.1 kc (provided) mechanical filters. Preset, dual time constant AVC for maximum efficiency on SSB. "S" meter operative on both SSB and CW as a peak-reading device. Mechanical filter disconnected for AM reception for a wider bandpass. Envelope detector provided for SSB and CW as well as normal diode type for AM. Silicon rectifiers permit compact design, reduce heat. Provision for operation from a DC power supply. **Frequency Range:** 80 through 10 meters with WWV on 15 mc; overtravel of 7.5 kc on all bands; bands covered by fourteen 200 kc segments. **Frequency Stability:** Drift will not exceed 100 cps in any 10 minute period after 30 minutes warm-up. Normal operation is within 1000 cps of dial reading. Dial accuracy 200 cycles all bands, visual; 300 cycles, electrical after calibration. **Sensitivity:** Better than 1 µv, CW measure with 50-ohm dummy antenna and a 10 db signal on, signal off ratio. **Spurious Response:** IF and image rejection more than 50 db; crossover spurious is down more than 50 db. **Automatic Gain Control:** AGC threshold, 0.5-1.5 µv; audio rise, 5-200 K µv, NM Γ 8 db; AGC rise time 0.1 sec., release time 1 sec. with 200 K µv input. **Output Level:** At least .75 watt with 1.0 µv CW signal. **Controls:** Off-Standby-Operate-Cal; RF Gain; AF Gain; Phone Jack; Dial Zero Set; Band Switch; "S"-Meter; Main Tuning; Preselector and Emission Selector. **Tubes:** 2-6DC6, 2-6U8A, 1-6BA6, 1-6AT6, 1-6BF5, 1-6AU6. **Power Required:** 85 watts nom., 105-125 v. AC, 50-60 cps. **Size:** 14½" w. x 11⅝" d. x 6⅞" h. Weight 20 lbs.

Collins Model 75S-1 Receiver—Net Each........... $495.00

POWER SUPPLIES

Collins Model 516F-2 AC Power Supply—Operates from 115 v. AC, 50-60 cps; provides all voltages for Model 32S-1 transmitter. **Size:** 10" w. x 12" d. x 7¾" h. Weight, 28 lbs.
Net Each.. $105.00

Collins Model 516E-1 DC Power Supply—Operates from 12 v. DC; provides all operating voltages for Models 32S-1 transmitter and 75S-1 receiver for mobile or portable use. Provision is made in both units for operation from this power supply. Transistorized for maximum efficiency and minimum maintenance. Model 516E-2 is also available for 28 v. DC operation **Size:** 11⅛" w. 7¾" d. x 5¾" h. Weight, 12½ lbs. Net Each....... $262.00

Collins Model 516E-2 DC Power Supply—Net Each... $445.00

MODEL 30S-1 LINEAR AMPLIFIER

Completely self-contained, single tube, grounded grid linear amplifier built in a floor-mounted cabinet. Can be driven by any exciter with 70 to 100 watts output into a 50-ohm line. Provides full legal power input for SSB (1 kw average) or 1 kw input for CW. Uses Eimac ceramic 4CX1000A, its air blower operates quietly, barely audible in a quiet room. Frequency coverage matches Models 32S-1 and 75S-1. May be loaded into an antenna without exceeding the legal DC input of 1 kw during tune-up. Multiple meter has its zero position at one-fifth of full scale. Tune position at any power level, loading is correct when meter reads zero. Automatic load control up to 12 db. Two power levels for SSB by front panel switching: 100 watts from exciter alone, 1 kw average input. Provided with RF inverse feedback for better linearity. Automatic load control voltage from the amplifier is fed back to Models 32S-1 transmitter or KWM-1 transceiver. Power supply, housed in the lower portion of the cabinet, provides cathode bias voltage and 3,000 volts for the 4CX1000A plate. Space provided for mounting Model 516F-2 power supply.

SPECIFICATIONS

Power Output: SSB—1000 watts PEP with 40 db signal to distortion ratio; 1300 watts PEP with 35 db signal to distortion ratio. CW—600 watts with 1 kw input. **Frequency Ranges:** 3.5-4.0 mc; 7.0-7.3; 14.0-14.4; 21.0-21.45; 28.0-29.7. Covers entire spectrum from 3.5 to 30 mc by retuning cathode circuit. **Harmonic Output:** Second harmonic at least 40 db down; all others at least 50 db down. **Noise:** With 1 kw single tone input, signal-to-noise-and-hum ratio at least 40 db. **Input Impedance:** 50 ohms unbalanced. **Outout Impedance:** 50 ohms, SWR 2:1 or less on all bands. **Controls:** Band Change, Multimeter, Filament, H.V., Bias Control, Tuning, Loading. **Tubes:** 1-4CX1000A plus 2-866A H.V. rectifier, 1-12AL5 ALC rectifier. **Power Required:** 115 or 230 v. AC, 50-60 cps single phase, 3-wire neutral ground; 2000 watts max. **Size:** 17" w. x 16⅝" d. x 30⅝" h. Weight, 160 lbs.

Collins Model 30S-1 Linear Amplifier—
Net Each.. $1470.00

30S-1

MODEL 312B-4 SPEAKER CONSOLE

Includes speaker, directional wattmeter (200 and 2000 w. scales), phone patch and control switches for control of models 32S-1 and 75S-1. Upper control switch has three position (Normal; Receive Only; Transmit Only). Lower switch has three positions (Phone Patch On and Off; Station Mute). **Size:** 10" w. x 12¼" d. x 7¾" h. Weight, 8½ lbs.

Collins Model 312B-4 Speaker Console—
Net Each.. $185.00

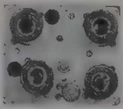
MODEL 312B-3 SPEAKER

Contains a 5" x 7" speaker and connecting cable. **Size:** 10" w. x 8" d. x 7¾" h. Weight, 4 lbs.

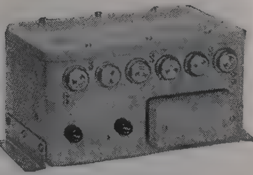
Collins Model 312B-3 Speaker—
Net Each.. $27.50

SSB Amateur Equipment

NOISE BLANKERS, WATTMETERS, SPEAKER ASSEMBLIES


136A-1

312B-2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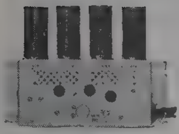
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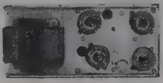
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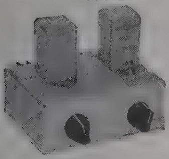
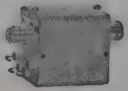

189A-2


302C-3

SSB NOISE BLANKERS

Highly effective in eliminating pulse interference of the type usually associated with ignition systems, electric motors, household appliances and some forms of atmospheric and corona discharge. Especially ideal for SSB reception, since silencing occurs ahead of the selective sideband filters. The compact 136 Series Noise Blankers may be readily installed in the Collins 75S-1 or 75A-4 Receivers or KWM-1 Transceiver.

Collins Model 136A-1 Noise Blanker—For 75S-1 Receiver. Net Each **$120.00**

Collins Model 136B-1 Noise Blanker—For KWM-1 Transceiver. Net Each **$120.00**

Collins Model 136C-1 Noise Blanker—For 75A-4 Receiver. Net Each **$165.00**

PHONE PATCH

Utilizes hybrid circuitry to insure no interaction between receiver and telephone for proper VOX operation. Operates equally well on AM or voice operated single sideband. Only 2 connections to phone line are required. Output and input impedances 600 ohms.

Collins Model 189A-2 Phone Patch—Net Each **$60.00**

DIRECTIONAL WATTMETER

Consists of a coupler and an indicator unit which may be housed in a small box on the operators desk or mounted in a custom panel. Wattmeter scales read to 2000 and 200 with ±.1% accuracy over the 2 to 30 mc range. SWR introduced by the coupler is less than 1.05:1.

Collins Model 302C-3 Directional Wattmeter—Net. . **$125.00**

MATCHING SPEAKER ASSEMBLIES

Model 312B-2—Console model incorporates a 5" x 7" speaker, built-in phone patch and directional wattmeter. All are mounted in a matching cabinet for fixed station use.

Collins Model 312B-2 Console Speaker Assembly—Net Each **$205.00**

Model 312B-1 (Not Ill.)—Includes 5" x 7" speaker mounted in matching cabinet for fixed use.

Collins Model 312B-1 Speaker—Net Each **$25.00**

POWER SUPPLIES

Designed for use with the KWM-1 Transceiver. **Model 516E-1** operates from 12 v. DC, utilizing power transistors as switching elements at 600 cps; eliminates vibrators and rotating machinery. A cable connected to the mounting tray enables the Transceiver to plug directly into the mounting tray. **Model 516E-2** supply available for 28 volts DC.

Collins Model 516E-1 DC Power Supply—Net Ea. . . . **$262.00**

Collins Model 516E-2 DC Power Supply—Net Each. . **$445.00**

Collins Model 516F-1 AC Power Supply—Net Each. . **136.00**

MOBILE MOUNTING TRAY

This kit will greatly facilitate mounting the KWM-1 under an automobile's dashboard, providing snap-in and snap-out installation of the Transceiver. Unit folds away when KWM-1 is removed. A number of different bracket styles are available. Write for information on brackets.

Collins Model 351D-1 Mobile Mount—Net Each. **$98.00**

DX CONVERSION ADAPTER

This unit replaces the crystal box and automatically changes transceiver operation to separate transmitter and receiver functions. This enables tuning of receiver outside the band to listen to DX and provides a choice of several crystal controlled transmitter frequencies in the band. The adapter allows duplex operation in any one band in the 14-30 mc range.

Collins Model 399B-1/2/3 DX Conversion Adapter—Net **$96.00**

CRYSTAL PLUG-IN UNITS

Fill requirements for other than the 10 basic 100 kc bands supplied with the KWM-1. Units plug into front panel. Can contain up to ten CR-18 HF oscillator crystals and a rotary tap switch for crystal selection.

Collins Model 13C-1 Crystal Plug-in Unit—Net Each. . **$18.00**

MECHANICAL FILTER ADAPTERS

Self-contained plug-in unit about the size of an IF transformer. Contains a Collins Mechanical Filter, two IF amplifier tubes with necessary circuits, and a tube-type connector for plugging the unit into either the first or second IF socket. Power and signal circuits for the Adapter are supplied through the original socket connections. Additional receiver versatility is possible in reception of CW, AM, SSB, and FSK with selection of the proper plug-in Adapter. For example, the 800-cycle band-pass Adapter may be plugged in for CW reception; the 1.2 kc or the 1.4 kc Adapters for either CW or FSK reception; the 3.1 kc Adapter for AM or SSB phone reception; and the 6.0 kc Adapter for AM phone reception. Complete installation can be made in a matter of seconds simply by pulling the designated IF tube and replacing it with the permanently-tuned Mechanical Filter Adapter.

WRITE FOR COMPLETE SPECIFICATIONS AND PRICES ON COLLINS MECHANICAL FILTERS.

FOR SP-400 AND HRO-60 OWNERS

Mechanical Filter Adapter Type	Filter Type Used	Bandwidth at −6 db	Net Each
353A-05	F455F-05	0.5 kc	$106.25
353A-15	F445F-15	1.5 kc	106.25
353A-31	F455F-31	3.1 kc	106.25
353A-60	F455F-60	6.0 kc	106.25

FOR SP-600-JX OWNERS

Mechanical Filter Adapter Type	Filter Type Used	Bandwidth at −6 db	Net Each
353B-05	F455F-05	0.5 kc	$106.25
353B-15	F455F-15	1.5 kc	106.25
353B-31	F455F-31	3.1 kc	106.25
353B-60	F455F-60	6.0 kc	106.25

465X-59C

FOR HRO-50 AND HRO-50T1 OWNERS

Mechanical Filter Adapter Type	Filter Type Used	Bandwidth at −6 db	Net Each
353D-05	F455F-05	0.5 kc	$106.25
353D-15	F455F-15	1.5 kc	106.25
353D-31	F455F-31	3.1 kc	106.25
353D-60	F455F-60	6.0 kc	106.25

MECHANICAL FILTER CONVERSION KITS

For convenient and permanent installation of one or more mechanical filters in your Collins receiver. The slight modification will mean the latest engineering approach to improvement of IF selectivity. Kits include all electrical and mechanical parts required for complete and permanent installation. Schematics and installation diagrams are included in the handbook of instructions. **We will be pleased to discuss your requirements for any special Adapter Kits.**

Kit Type	Collins Receiver Type	Number of Filter Positions	Net Each
354A-1	51J-2 (above Ser. No. 500) & 51J-3	3 3	$100.00 (Less F500B-series Filters)
354B-1	51N-2	1	$50.00
354D-60	18S-4	1*	75.00
Filter for 354A		†	78.75

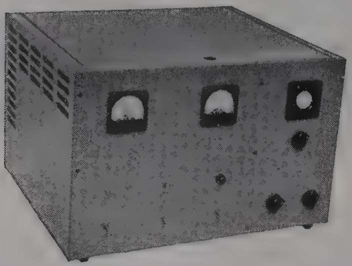
*Wired-in filter. †Specify bandwidth.

FOR THE VERY LATEST IN AMATEUR EQUIPMENT CONSULT OUR EXPERTS. WRITE FOR PRICES AND SPECIFICATIONS ON NEW OR UNLISTED ITEMS.

Amateur Equipment, Accessories

ELDICO SSB GEAR, ACCESSORIES

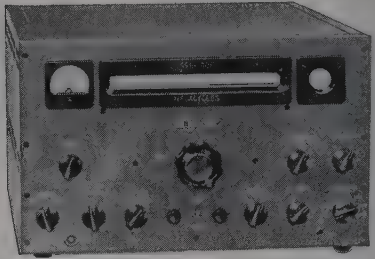
MODEL SSB-1000F ALL PURPOSE RF AMPLIFIER



A full kilowatt table-top companion to the SSB-100F for the most versatile linear transmitter available to the amateur. Using a pair of Eimac's 4CX300 radial beam power tetrodes, compactness, high efficiency, dependability and excellent high frequency characteristics are maintained. High power sensitivity makes class AB_1 operation feasible with no sacrifice in efficiency, yet with remarkably improved linearity. Fully self-contained in a table-top receiver type cabinet with heavy duty, compact power supply. Adequate filtering and good regulation is provided through swinging choke and high capacity oil-filled condenser. Miniature rotary blower provides cooling. An internal oscilloscope continuously monitors the linearity; comparing input and output wave forms to assure proper loading and operation at all times. Single control for band switching 80 through 10 meters with conventional pi network output to match a wide range of antenna impedances. Drive requirement of 30 watts PEP will drive to full kw. **Frequency Range:** Covers 80 meter to 30 mc, in five bands. **Power Rating:** 2,000 watts PEP input; 750 watts AM input. **Tubes:** 2-866; 2-OA2; 1-OB2; 1-6AU6; 1-1CP1; 2-4CX300. **Cabinet:** Flat gray table model with interlocked hinge cover. **Size:** 11″ w. x 16⅜″ d. x 11″ h. Weight, 98 lbs.

Eldico Model SSB-1000F—Net Each.............. **$745.00**

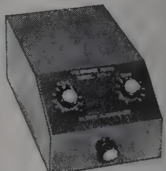
MODEL SSB-100F EXCITER/TRANSMITTER



All-band 100-watt basic exciter/transmitter, completely self contained. A potent rig by itself; versatile exciter for SSB-1000F amplifier, too. Employs dual crystal lattice filter for better than 50 db attenuation of unwanted sideband. Attenuation of third order distortion products is more than 35 db. Chirpless, clickless CW keying. Voice-controlled oscilloscope continuously monitors linearity of all RF stages and assures proper loading of final amplifier. Calibrate signal level control permits zero beat on any signal. regardless of amplitude. Instantaneous mode and final amplifier band switching. Pi-network output permits matching wide range of impedance. **Type of Emission:** CW, AM, SSB. **Power Ratings:** DC average input SSB, 100 watts; AM (two-tone test), 60 watts; peak SSB envelope power input, 144 watts; peak envelope power output SSB, 100 watts. **Harmonics, etc.:** Spurious mixer products down 50 db or more; TVI suppression 40 db or more on second harmonic, 60 db or more on higher order harmonics. **Unwanted Sideband and Carrier Suppression:** 50 db minimum attenuation. **Frequency Stability:** Control oscillator (800-1300 kc) ± 100 cps after two minute warmup; output frequency within 300 cps after five minute warmup. Dial accuracy ± 2 kc after calibration. **Frequency Range:** Covers 80 meters (3500-4500 kc), 40 meters (7000-7300 kc); 20 meters (14,000-14,350 kc), 15 meters (21,000-21,450 kc); 11 meters (26,900-27,400 kc), and 10 meters (28,000-29,500 kc). **Tubes:** 22, including two rectifiers, two voltage regulators, 'scope and 5894 power amplifier. **Size:** 17$\frac{1}{16}$″ w. x 16⅜″ d. x 11″ h. Weight, 50 lbs.

Eldico Model SSB-100F—Net Each.............. **$795.00**

MODEL TFP-1 TELEPHONE PATCH

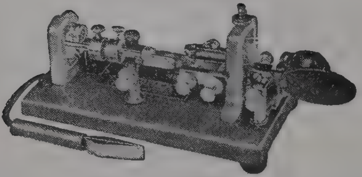


Hybrid type patch with transistorized, amplifiers and AVC limiting action. Self-contained telephone line transformer and constant impedance network provide better null balance, permitting TPF-1 to remain balanced over a wider range of telephone line conditions. RF filtering prevents RF feedback. Unit is completely shielded. Self-powered with 9 v. dry battery; battery drain very low. Permits voice controlled operation if transmitter is so equipped. Once conversation has started, two-way operation can be achieved with no further operation of controls. Balance potentiometer in conjunction with hybrid transformer cancels any signal from the receiver that would normally be fed back into the transmitter. One switch turns the unit on, connects it to the phone line, opens the receiver loudspeaker circuit, and switches the transmitter from mike to phone patch. Earphone jack on rear permits operator to properly set balance control. Provision for connecting test meter to measure level inserted into telephone lines. **Size:** 4½″ w. x 7⅝″ d. x 3¾″ h. Weight, 4 lbs.

Eldico Model TFP-1—Net Each.................... **$79.95**

VIBROPLEX TRANSMITTING KEYS

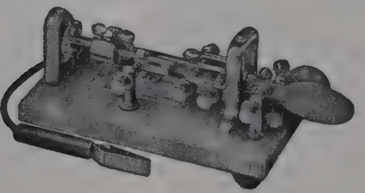
THE "ORIGINAL"



Suitable for all classes of transmitting work where speed and perfect Morse are prime essentials; famed for its clarity, precision and ease of manipulation. Can be slowed down to 10 words per minute or less, or geared to high speed as desired. Maintains same high quality signal at any speed, insuring easy reception under all conditions. Has 2 pairs of contact points: one for dots, the other for dashes. Weight, 3 lbs. 8 oz. Standard finish. Net Each.................................. **$19.95**

The "Original"—Deluxe finish. Net Each............**$23.95**

THE "PRESENTATION"



24-K gold plated base top. Super-speed control main spring. Patented jewel movement. Instantaneous adjustment to any speed. Red switch knob, finger and thumb piece and adjustable main spring.

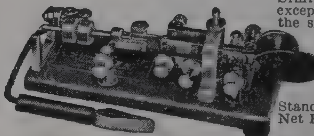
The "Presentation"—Net Each.................... **$29.95**

THE "LIGHTNING BUG" (NOT ILLUS.)

Greatest sending ease. Single lever, improved flat pendulum, instantly adjustable dot contact spring, circuit breaker parallel with pendulum. 2 pairs of points. Weight, 3 lbs., 8 oz. Standard finish. Net Each.......................... **$18.95**

The "Lightning Bug"—Deluxe finish. Net Each......**$22.95**

THE "BLUE RACER"



Similar to "Original" except that it is only half the size. Suitable for all classes of telegraph work. Single lever. 2 pairs of contact points. Weight, 2 lbs., 8 oz. Standard finish. Net Each..... **$19.95**

The "Blue Racer"—Deluxe finish. Net Each..........**$23.95**

THE CHAMPION (NOT ILLUS.)

The "Champion" is an inexpensive transmitter for radio use only, having exceptional sending qualities. The clarity, speed and sending ease will appeal alike to amateur and professional radio operators. Single lever with 2 pairs of contact points. Mounted on large standard size base. Weight 3 lbs. Without circuit closer, cord and wedge. Chromium finished top parts, with black crystal base. **The "Champion"**—Net Each........... **$15.95**

Amateur Gear and Accessories

OLYTRONICS LAB CITIZENS' BAND TRANSCEIVER

ır-channel transceiver offering a choice of 22 frequencies in the mc range. Features sensitive, dual conversion 10-tube superhet eiver with rapid squelch adjustment; delayed AGC gate-type se limiter; low distortion response; full 2 watts audio output. ctronic changeover circuit switches from transmit to receive hout relays. Separate mike preamplifier helps stop background, d noise; mike is carbon press-to-talk type with replaceable cord. lt-in carrier and modulation indicator. TVI filter is built-in. que power supply permits plug-in convenience; changes from to AC sources quickly. All electronic circuitry eliminates hanical relays; designed for continuous duty. Operating range iles minimum on open, flat terrain, mobile; 10 miles minimum, e conditions at base station with 50 ft. antenna elevation. nes complete with crystal for single channel, indoor antenna, versal mounting brackets, AC and DC line cords, mike with ckets, ignition noise filter and complete instructions with FCC s and station application form. RECEIVER: **Sensitivity:** ter than 0.5 μv for 10 db; S + N:N ratio at 30% at 1 kc for any adjacent channels. **Selectivity:** 8 kc (±2 kc), 6 db bandwidth; kc (±5 kc) bandwidth, 60 db. **Frequency Response:** ±6 db, -3000 cps. **Distortion:** Less than 15%. **Hum and Noise:** Better n −40 db at 1 watt output. **Image:** −70 db direct; −95 db, rect. **Rejection:** −40 db, adjacent channel; −60 db alternate nnel. **AGC:** Occurs between 2 and 3 μv; audio output varies less n 5 db, 3-0.2 μv. **Audio Output:** At least 2.0 watts into 4″ PM therproof speaker. **Tubes:** 10. TRANSMITTER: **Power ut:** 5 watts max. (200 volts at 25 ma) to final. **Power Output:** east 2.5 watts for any 8 adjacent channels. **Modulation:** 85% 00% at average speaking level. **Hum and Noise:** −40 db from modulation level. **Harmonic Suppression:** Better than −60 lown; exceeds latest FCC requirements. **Antenna Matching:** ustable for 52 or 72 ohms, resistive. **Tubes:** 3. **COMPLETE T: Crystals:** 27.005 mc (channel 3) supplied, unless otherwise eified, for both receive and transmit sections. Plug-in locations vided for 3 additional crystals with switch selection therefor. **cial Features:** Takes 90° C at 95% humidity for 8 hours and operates. Withstands 0.15″ shake, 60-1,800 cps for 30 minutes ll planes. Withstands 15 g shock in 3 planes.

rtronics Model PC-1-6 Poly-Comm—For 6 v. DC and 110 v. operation. Complete with push-to-talk mike and essories as stated. Net Each.................... **$159.50**

rtronics Model PC-1-12—Same, but for 12 v. DC and 110 v. operation. Net Each.............................**$159.50**

rtronics Model AM-1 Mobile-Marine Antenna—Standard 96″ with swivel base, 6″ spring mount, lead-in and hardware. Each.......................................**$10.50**

rtronics Model AB-1 Ground Plane Antenna—Base station for use on ¾″ IPS pipe; less hardware or line. Net **$32.50**

rtronics Model AB-2 Ground Plane Antenna—Heavy duty ion for severe environmental areas. Less hardware or cable. Each.......................................**$42.21**

tronics Model AM-2 Mobile Whip—Quarter-wave base loaded cowl or fender mount; with cable, connectors. Net. **$15.75**

tronics Model AM-3 Mobile Whip—Gutter clamp mounting ion of above. Net Each...........................**$15.60**

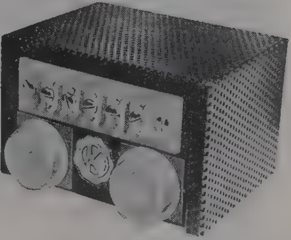
tronics Model AM-4 Deluxe Mobile-Marine Whip—102″ with swivel base mount, coax, connectors and hardware. Each.......................................**$18.90**

tronics Model AR-1 Helical Whip—Normal mode, wound le 4 ft. tapered white fiberglas rod. Rod only; ⅜-24 thread nt. Net Each.....................................**$13.95**

tronics Model AB-1 Ball Mount—With coax fitting, ½-wave cable and connectors. Net Each..................**$7.00**

KUPFRIAN TRANSISTORIZED POWER SUPPLIES

- **CONVERTS LOW VOLTAGE DC TO HIGH VOLTAGE AC OR DC**
- **IDEAL FOR MOBILE COMMUNICATIONS, MARINE NAVIGATION, ETC.**

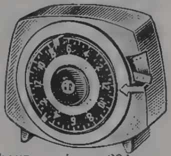


High efficiency design steps up battery supplies to high voltage; conserves battery power. Rugged, long life design uses no tubes; provides many thousands of hours operation even under adverse conditions of shock, moisture and vibration; has no moving parts. Practically maintenance-free. Instant starting for immediate response, unit is mechanically and electrically quiet; minimizes radio interference; has no contacts to arc or pit. Compact engineering provides at least 80% efficiency through the use of grain-oriented, thin ribbon transformer core. Handy package form provides screw hole mounting for direct attachment to associated chassis. Heavy aluminum chassis and perforated cover dissipate heat. AC models have AC convenience outlet for 117 volts. **Ripple Output:** 0.4% max. **Temperature Range:** −55° C to +60° C, ambient. **Size:** 4⅛″ w. x 3⅜″ d. x 2½″ h., except where otherwise specified. Weight, 1½ lbs.

Kupfrian Model	Input VDC	Output			Net Each	
		Volts†	Current	Watts	Wired	Kit
CA-0631-05	6.3	300/150	165/330 ma	50	$ 45.00	$36.00
CA-1231-10	12.6	300/150	330/400 ma	100	49.50	40.50
CA-1252-10	12.6	500/250	200/400 ma	100	54.00	45.00
CA-1263-12	12.6	600/300	200/400 ma	120	59.00	50.00
CA-12105-10‡	12.6	1000/500	100/200 ma	100	57.00	48.00
CA-2452-20	24	500/250	400 ma	200	79.50	70.50
CA-2852-22	28	500/250	450 ma	225	87.00	78.00
IA-1260-10P#†	12.6	117 AC	60 cps	100	45.00	36.00
IA-1260-25§	12.6	117 AC	60 cps	250	87.00	......
IFA-1260-25*§	12.6	117 AC	60 cps	250	120.00	......
IA-124C-10	12.6	117 AC	400 cps	100	41.25	32.25
IA-244C-20‡	24	117 AC	400 cps	200	87.00	......

*Frequency Regulated. †DC unless otherwise specified. ‡4⅜″ w. x 4½″ d. x 2½″ h. §8″ w. x 5½″ d. x 4½″ h. #Has plug-in cord to operate from cigarette lighter and convenience AC outlet.

INTERMATIC "TIME-ALL" SWITCH

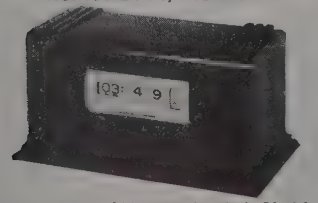


A continuous duty timer designed for the home, office or store. Turns appliances on-off automatically. Converts any radio into a clock radio. Protects home from prowlers by turning lights on and off while you are away. Easily adjustable defroster for the refrigerator. Repeats performance daily without resetting. Four-position manual control: Forward positions turn appliance on-off without disrupting automatic operation; rear positions skip automatic operation while turning on-off Minimum on or off time 1 hour, maximum 23 hours. Large easy-to-read dial. Plug-in receptacle for equipment to be controlled. Gray plastic case can stand on table or mount on wall (two mtg. holes in rear). 5″ x 4″ x 2½″. Capacity: 1650 watts or 15 amps. 110-125 volts, 60-cycle AC only. U/L Approved.

Type A211—With 6′ cord, plug and instructions. Net Each.. **$7.97**

PENNWOOD CLOCKS

24 HOUR G.M.T. TYMETER ELECTRIC CLOCK NO. 100-24H 1/4 JEFFERSON



dsome numeral type 24 hour station clock. Ideal for amateur ons, commercial stations, or short wave listeners—wherever our time is preferred.

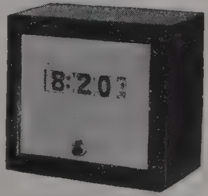
nwood Model 100-24H 1/4—Walnut finish. Net Ea. **$15.00**

nwood Model 100-24H 1/4—Ebony finish. Net Ea..**$15.00**

nwood Model 100-24H 1/4—Ivory finish. Net Ea.. **16.00**

MODEL 700 GLOLITE® TELEVISION LAMP-CLOCK

Featuring the **Glolite Luminescent Window** with "Focalizer" stare break. Used on or near the TV set, this lamp-clock relieves viewers of eye-strain from TV glare. Can be used in bedroom or nursery as comforting night-light. Colorful numbers tell time at a glance. Self-starting motor and cord are U/L approved. Gold trimmed screen. Guaranteed for 25,000 hours of normal use. Plastic case available in walnut or ivory finish. **Size:** 5½″ w. x 3½″ d. x 5″ h. Weight: 2½ lbs.

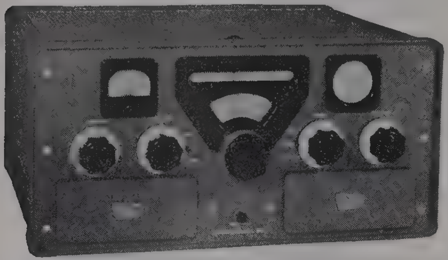


Pennwood Model 700—Ivory Net Each.. **$8.49**

Pennwood Model 700—Walnut. Net Each..............**$7.95**

Central Electronics, Inc. Amateur Equipment

MODEL 100V EXCITER-TRANSMITTER



A new dimension in amateur radio—the first true, single dial broadband transmitter with 100 watts output. The VFO is its only tuning control. A single knob bandswitch selects 80, 40, 20, 15 and 10 meters for SSB, DSB, AM, PM, CW and FSK. New phasing sideband generator provides top audio quality with 50 db carrier and unwanted sideband suppression; distortion products are −40 db, minimum. Circuits other than VFO are fixed frequency or band pass using famous Multiphase broadband couplers. VFO is permeability tuned with a precision lead-screw in preloaded ball bearings. Frequency reads directly in 1 kc increments, selected by two-speed (750 cps or 100 kc per turn) knob. Pointer on slide-rule scale indicates 100 kc increments. Calibration is to zero beat accuracy every 50 kc: ±250 cps between 50 kc intervals; easily recalibrated without removal. VFO covers 5 to 6 mc, heterodyned against crystal oscillators or the master SSB signal. The sideband generator operates at a fixed crystal frequency.

FREQUENCY COVERAGE

Single knob bandswitch selects 80, 40, 20, 15 or 10 meters with a generous overlap for MARS, CAP and commercial uses. A 50 kc overlap at each band end allows for inaccuracy. A spare position permits installing couplers for 160 meters or 1 mc portions of 2.5-25.5 mc ranges, or 2 mc portions of 25.5 and 29.7 mc.

POWER OUTPUT

Final linear amplifier stage uses paired 6550 tubes rated for continuous ultralinear hi-fi uses. Plate dissipation is 35 watts per tube; delivers 100 watts single tone RF on 10 meters under load. Output control variable down to 10 watts.

ONLY FOUR OPERATING CONTROLS

Function Switch: Selects Power Off, Standby, VOX, Push-to-talk (PTT), and Manual. **Band Switch:** Selects five amateur bands or spare position. A lever switch below the bandswitch changes the meter to read Watts Input 0-200, RF Amps into feed line, or Power Line Volts. **Calibrate Level:** Varies calibrate output of exciter to suit band conditions. Lever switch selects Voice, Off, and Carrier for calibrating while talking or with unmodulated carrier for zero beat. VOX relay automatically removes Calibrate carrier on voice reception; the carrier may be used to copy SSB on unstable AM receivers and to give "S" meter reports. **Emission Selector:** Nine positions include Lower, Upper and Double sidebands with suppressed carrier; Lower, Upper and Two Sidebands with preset carrier; Phase Modulation with preset carrier; three-way keying CW with preset carrier; and, Frequency Shift Keying for teletype with preset carrier. Spring-return position checks carrier null for suppression.
Other Controls: Concealed behind magnetic doors are Speech Level; Voice Control Trip Level; Anti-Trip Level; VOX Relay Release Time; FSK Deviation; Carrier Null A and B; Preset AM and CW Carriers; Power Output; and CW Monitor Level.

ADVANCED PHASING SSB GENERATOR

Performance exceeds that of filters with equally long term stability. Uses no-tuning broadband circuitry in balanced modulator to make it non-critical. Carrier suppression is held stable in excess of 50 db below maximum output. The "Null" position on Emission selector connects the meter to indicate db carrier suppression readable to −80 db. Audio phase shift network uses heat cycled components with 0.1% accuracy; combined with other circuits, it is capable of at least 50 db of unwanted sideband suppression. Inverse feedback of 35 db is applied around the modulator system to insure long term audio amplitude balance. RF phaseshift circuit is non-critical, low impedance, wideband design for ultimate SSB suppression and long term stability.

OTHER FEATURES

Self-contained 2″ oscilloscope shows RF non-linearity in trapezoid form; assures correct adjustment for loading at all times. Bandpass audio filter has steep side response and rejection to stop conventional "ringing"; maintains 50 db sideband suppression beyond the phase limits of the audio phaseshift network. New audio limiter keeps distortion products out; maintains modulation level within 1 db at the balanced modulator; follows the limiter and holds bandwidth between 200 to 3500 cps even at impractical clipping. Allows 10 db of clipping with only negligible increase in distortion. Front panel neon indicator shows when limiting begins. A speech level control is calibrated in db to determine amount of limiting easily. Patch sockets for remote control of a companion receiver are supplied. **Size:** 19¼″ w. x 15″ d. x 8¾″ h. Shipping Weight, 90 lbs.

Model 100V—Standard gray tabletop unit, wired. With 8¾″ x 19″ panel suitable for rack mounting. Net $695.00

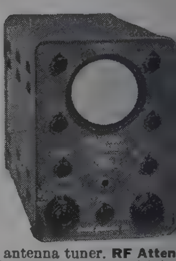
NEW BROADBAND LINEAR AMPLIFIER 600L

No tuning controls, servos or moving parts other than bandswitch Single 813 in Class AB_2. New band-pass couplers provide high lin ear efficiency, up to 60%. Designed for 52-72-ohm coaxial inpu and output. Easy to drive, approx. 8 watts effective drive powe for 500 watts DC input. Built-in power supply, bias and scree regulation, 45 µf oil filled paper output capacitor. Extremely lo intermodulation distortion. Automatic relay protects 813 and R couplers. Excellent stability; complete freedom from parasitics Effectively TVI suppressed; RF compartments thoroughly shield ed, bypassed. Gray tabletop unit. **Size:** 18″ w. x 15″ d. x 9″ h Shipping Weight, 117 lbs.

Model 600L Broadband Linear Amplifier—Net Each. $495.00
Available also in gray or black wrinkle finish rack panel. (Specif choice). **Size:** 19″ x 8¾″ x 14⅓″ deep. Net Each.....$495.00

Model AS-600 Antenna Selector Switch—Attaches to bandswitc shaft to automatically select proper antenna for each band. Us with Model 600L. Shipping Weight, 1 lb. Net Each....$13.65

MODEL MM-2 MULTIPHASE RF ANALYZER



Compact 3″ oscilloscope has self-contained 1000 cps audio oscillator for maximum convenience in analyzing transmitter RF systems and IF envelope patterns of received signals. **Transmitter Checks:** Overmodulation, modulation percentage, modulation linearity, negative peak clipping, sideband suppression, carrier suppression, RF amplifier linearity, neutralization, modulator matching, positive peak parasitics, hum and noise, oscillation and spurious radiation, regeneration, RF power and power ratio, antenna loading and CW wave shape. **Audio Oscillator:** 1000 cycle unit with less than 0.5% distortion; available at 2 output levels; 15 mv and 1.5 volts. **No Tuning:** May be used with other antenna systems using short "pick-up" antenna or coupling to PA tank coil or antenna tuner. **RF Attenuator:** Capacitive type calibrated in 3 db steps; at max. sensitivity 5 watts RF produce a 1″ high pattern. For transmitters up to kw, 1 mc to 55 mc with useful indications to 200 mc. **Functio Selector:** Manual Envelope, Sine Envelope, Speech Envelope AF Trapezoid or RF Trapezoid transmit patterns. **Sweep Control** Has 10:1 frequency range; locks on speech, tones or CW; saw-toot sweep for linear display. **Receiver Connections:** Solderles sampling cable and grid pin number chart furnished for attachment of unit at the grid of the last IF amplifier tube; plug-i adapters for 50 kc, 80 kc, and 450 to 500 kc are available. **Cabinet** Modern, gray wrinkle finish steel. **Other Features:** Mu-meta CRT shield prevents all hum. **Power Supply:** Self-contained fo operation on 115 v. AC, 50-60 cps. For use with 25 to 100 ohm coaxial cable. **Size:** 6¼″ wide, 14½″ long, 9⅛″ high with rubbe feet. Shpg. Wt., 19 lbs.

Model MM-2 RF Analyzer—Wired and tested, less RM adapter. Net Each........................ $129.50
Model MM-2 RF Analyzer Kit—With instructions, less RM adapter. Net Each.................................$99.50
Models RM-50 (50 kc), **RM-80** (80 kc) or **RM-455** (450 to 500 kc) **IF Adapters**—Net Each..........................$9.95

MODEL GC-1 GATED COMPRESSION AMPLIFIER

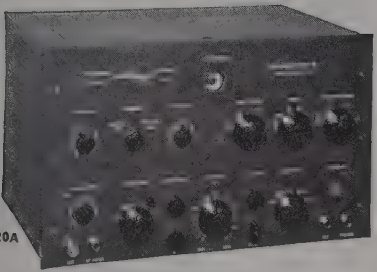
Complete audio system provides auto matic volume control in SSB, AM an CW; eliminates blasting. Connects be tween the secondary of the receiver' output transformer and the speaker voic coil; or, if a sideband slicer is used, con nected between the slicer volume contr jack and the speaker voice coil. **Audi Response:** 6 db down at 100 and 10,00 cps. **Hum and Noise:** 50 db down fro full output. **Input Impedance:** 80,00 ohms at 1 kc. **Compression:** Begins at 0. v. input; range is 40 db with less than db increase in output. **Power Output** Adjustable up to 2 watts into 3-8 oh speaker; distortion negligible. **Connections:** Phono jacks and screwdriver ter minal strips; extra phone jack for head phones, etc. **Power Supply:** Self-contained for operation on 115 v 50-60 cps. **Cabinet:** Gray wrinkle finish steel. **Size:** 6¼″ wid 14½″ long, 9⅛″ high with rubber feet. Shpg. Wt., 17 lbs.

Model GC-1 Amplifier—Wired and tested. Net Each.. $59.50
Model GC-1 Amplifier Kit—With instructions. Net Ea..$49.50

Central Electronics, Inc. Amateur Equipment

10 AND 20-WATT MULTIPHASE EXCITERS

10B



20A

'wo models providing a choice of 10 or 20 watts P.E.P. output SB, AM, PM and CW. They feature perfected voice-controlled reak-in on SSB, AM and PM. Select upper or lower sideband at he flip of a switch, with 40 db of suppression. New type carrier ontrol permits insertion of any amount of carrier without dis- ırbing carrier suppression adjustments. Talk yourself on frequency. Calibrate signal level is adjustable from Zero to full output. AF input jack is provided for oscillator or patch cord. CW reak-in operation. Accessory power socket provided.

MODEL 10B 10-WATT MULTIPHASE EXCITER

'rovides 10 watts P.E.P. output SSB, AM, PM and CW. Features ıulti-band operation using plug-in coils. Existing amplifier may be perated in Class A, AB1, AB2 or B as a linear amplifier by applyng proper fixed bias. Linear amplifier operation provides subtantial reduction of harmonic output. Controls: Speech Level, 'ive-Position Modulation Selector (Sideband 1 and 2, AM, PM nd CW), Carrier Control, VFO-XTAL Switch, Operation Selecor, Calibrate Level, Mixer and Amplifier Tuning, and Power Dn-Off Switch. Plug-in Prealigned Phase Shift Network Model 'S-1 included. Tubes: 3-12AT7, 1-6U8, 1-6BA7, 1-6AG7, 1-5U4G, -6AL5. Choice of Gray Table Model 14¾" wide x 8¾" high x 10" eep, or Gray or Black Wrinkle finish Rack Model with standard ack panel 19" x 8¾" high. State Choice. Shipping Weight, 36 lbs.

Iodel 10B Multiphase Exciter—Wired and tested, with plug-in oils for one band (Please Specify), and instruction ook. Net Each.............................. $\$179^{50}$

Iodel 10B Kit—With plug-in prealigned phase shift network, olor coded wiring harness, tubes and all parts. Complete building nd aligning instructions, plug-in coils for one band (Please pecify). Iet Each.................................. $\$139^{50}$

20-WATT MULTIPHASE EXCITER MODEL 20A

Iigher power SSB Exciter providing 20 watts output SSB, AM, M and CW; bandswitching from 10 to 160 meters; switching SSB ith or without carrier; double sideband AM; narrow band phase ıodulation; CW break-in; voice operated break-in and reduced armonic TVI. Existing final usually can be operated in Class A, B1, AB2 or B as a linear amplifier by applying proper bias with ubstantially reduced harmonic output. Magic Eye RF indicator ıows carrier balance and maximum peak output, can be adjusted) show maximum undistorted output. Operating controls are ıme as Model 10-B with added Indicator Switch to change the Iagic Eye RF indicator from Carrier Null to Monitor Maximum eak Output, and a Level Control to adjust the Magic Eye deflecon to show maximum undistorted peak output. Tubes: 3-12AT7, -12BH7, 1-6BA7, 2-6AG7, 1-6E5, 1-5U4G, 1-6AL5. Choice of ray table model 14¾" w. x 8¾" h. x 10" d. cabinet with top ccess door, or black or gray wrinkle rack model with 19" x 8¾" andard rack panel. State choice.

Iodel 20A Multiphase Exciter—Wired and tested. hipping Weight 35 lbs. Net Each................. $\$279^{50}$

Iodel 20A Kit—With factory wired and tested three stage Band witch RF unit, plug-in prealigned Phase Shift Network (PS1), olor coded wiring harness, tubes and all parts. Comlete building and aligning instructions. Net Each... $\$219^{50}$

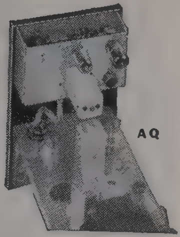
SIDEBAND SLICER—"Q" MULTIPLIER

B

DQ

MULTIPHASE "Q" MULTIPLIER:

- PEAKS DESIRED PHONE OR CW SIGNAL
- NULLS INTERFERING CARRIER UP TO 50 DB—NO LOSS IN SPEECH INTELLIGIBILITY
- NO INSERTION LOSS—NEW TWO-TUBE CIRCUIT
- SPECIAL HIGH "Q" POT CORE INDUCTOR



AQ

MODEL B SIDEBAND SLICER

Sideband Slicer featuring the built-in multi-phase "Q" Multiplier for greatly improved performance. Improves any receiver by cutting QRM in half. Utilizes the phase shift principle to provide selectable single sideband reception of SSB, AM, PM and CW signals. Can be connected to any communications receiver whose IF system is within the range of 450 to 500 kc. Other frequencies are available on special order. Three simple screwdriver adjustments place the unit in operating adjustment. No test equipment is needed. Self-contained transformer type power supply, 115 v., 60 cycle AC. Size 5½" x 8¾" x 13" deep. In gray wrinkle case. Shipping Weight 17 lbs. Instructions.

Model B Sideband Slicer—Wired and Tested, with Tubes. Ready to Operate. Net Each................. $\$99^{50}$

Model B Sideband Slicer Kit—Coded, laced, preformed wiring assembly. Plug-in prealigned phase shift network, tubes and instruction book. Ready to Assemble. Net Each... $\$69^{50}$

Model A Sideband Slicer—Same as above but without Multiphase "Q" Multiplier. Wired and Tested, with Tubes. Ready to operate. Instructions. Net Each........... $\$74^{50}$

Model A Sideband Slicer Kit—Coded, laced, preformed wiring assembly. Plug-in prealigned phase shift network. Tubes and instruction book. Ready to assemble. Net Each... $\$49^{50}$

DESK MODEL DQ "Q" MULTIPLIER

Desk Model "Q" Multiplier for use with any receiver having 450 to 500 kc IF. In attractive, compact case with connecting Power-IF cable. Power supplied by receiver. Also provides added selectivity and BFO in mobile SSB or CW reception.

Model DQ "Q" Multiplier—Wired and tested, ready to operate. Net Each.......................... $\$29^{50}$

Model DQ "Q" Multiplier Kit—Ready to assemble. Net Each.. $\$22^{50}$

MODEL AQ CONVERTER

Converts Model A Slicer into a Model B. Plugs into the accessory socket of the slicer. New front panel and controls are provided to give all the advantages of "Q" Multiplier selectivity on SSB, AM and CW with your present Model A Slicer. Shpg. Wt., 16 lbs.

Model AQ Converter—Wired and tested, ready to install. Instructions. Net Each..................... $\$29^{50}$

Model AQ Converter Kit—Ready to assemble and install. Instructions. Net Each....................... $\$22^{50}$

MULTIPHASE ACCESSORIES

MODEL PS-1 PHASE SHIFT NETWORK

Available separately for home constructors. Sideband rejection 40 to 45 db over 225 to 2750 cps. Interchangeable in exciters or receiver adapters. Electrically identical to units described in GE Ham News for the SSB Jr. and Signal Slicer. With socket and diagram. Shipping Weight 1 lb. Net Each..............**$8.95**

PLUG-IN COILS—For Model 10B, 160 to 10 meters; please specify band desired. Net Each.......................**$3.95**

MODEL QT-1 ANTI-TRIP UNIT—Plug-in accessory for Multiphase Exciters. Prevents noise or received signal from tripping the voice control. Net Each..............................**$12.50**

MODEL 458K COMMAND SET KIT—To modify BC-458 into Bandswitched VFO for Multiphase Exciter. Includes DC oscillator filament supply and calibrated dial for operation 160, 80, 40, 20 and 15 meters. Net Each...........................**$17.50**

MODEL AP-1A ADAPTER—Plug-in IF stage, 450-500 kc, used with Slicer, allows receiver to be switched back to normal. Wired and tested, with tube and instructions. Shipping Weight, 1 lb. Net Each.......................................**$9.95**

MODEL AP ADAPTER—For use with A or B Sideband Slicer with receivers having an IF of 50, 75, 80, 85, 100, 262 and 915 kc. Completely wired, with crystal. Net Each.............**$12.50**

Cesco Amateur Equipment

REFLECTOMETERS, MINIBRIDGE, PHONE PATCHES

CM-52,
CM-75

Phase Unit

Control

CM-52-2 and CM-75-2

CM-52-2 and
CM-75-2 Special

CL-52-72

"Original"

"Supreme"
"Regency"

STANDING WAVE REFLECTOMETERS

MODELS CM-52 AND CM-75

Employs mutual inductance and capacity coupling between linear conductors for continuous measurement of standing waves on transmission lines. For continuous line insertion 25 to 1,000 watts, at frequencies from 3 to 200 mc. Will operate on power input of 10 watts, 7 mc and up. Requires only five watts output, 100 mc and up. Line insertion loss, less than 1 db at 30 mc. Ideal for inserting into coax feed lines at antenna for visual reading in SWR while making antenna adjustments; SWR observed immediately, at all times, without adjustment of Reflectometer. No balancing adjustments, no reversing. Prevents false loading from antenna tuner, match box, pi network, etc. Reduces line reflection, making possible increased radiated power. Relative power output. Uses 0-100 μa meter calibrated directly in standing wave ratio and relative power. Each unit hand calibrated and perfectly balanced. Includes loading control and forward to reflected power reversing toggle switch. With 83-1R (SO-239) connectors at each end. Gray hammertone aluminum case, 3" w. x 2⅛" d. x 5¼" h. Shipped with key-type mounting on back and full instructions.

Cesco Model CM-52 (52-ohm coax line) or CM-75 (75-ohm coax line)—Net Each.................... $29.95

Cesco Model CM-75 Equipped With UG-58U Connector—Net Each..$34.95

MODELS CM-52-2 AND CM-75-2

Dual units identical electrically to CM-52 and CM-75 but built in two units for remote control. Comes with 10 ft. cable and plug wired to control and indicator unit. Either 52-ohm or 75-ohm phase unit may be used with control and indicator unit; permits purchasing second phase unit separately, when desired. **Size:** Control Unit, 3⅞" w. x 2⅞" x 2¾" with sloping panel; Phase Unit, 2¼" w. x 2¼" d. x 5¼" h.

Cesco Model CM-52-2 (52-ohm coax line) or CM-75-2 (75-ohm coax line)—Net Each.................... $34.95

Cesco Model CM-75-2 Equipped With UG-58U Connector—Net Each..$39.95

Cesco Model CM-52-2 or CM-75-2 Phase Unit—Less control unit. Net Each..$12.95

Cesco Model CM-52-2 or CM-75-2 Special—Same as standard dual unit except with control panel for Collins grille or built-in installation. Net Each..............................$34.95

MODEL CL-52-72 MINIBRIDGE

Resistive type unit for observing standing waves when adjusting antenna matching networks. For use on 52, 72 or 75 ohm coax lines and small amounts of RF excitation or grid dip oscillator. Requires use of external indicator, such as 0-100 μa meter (as in Simpson multi-meter); meter can be run remote to tower for SWR observation while making antenna adjustments. Hammertone gray aluminum case, 2⅛" w. x 1½" d. x 4⅛" h. Complete with instructions, SWR graph and antenna tuning procedures.

Cesco Model CL-52-72—Net Each.................................... $12.95

TELEPHONE PATCHES

"ORIGINAL" TEL-O-PATCH

High quality sound receiving and transmitting unit for low-Z lines in amateur and experimental use. Undistorted voice reproduction with perfect intelligibility at 100% modulation. Eliminates feedback, hum, noise, etc. Designed for high gain input but can be adapted to low gain input. Works on any receiver with an output impedance of 500-5,000 ohms. Mounts on receiver or operating desk by means of reversible mounting plate. Provides standard phone jack output; Amphenol 75-PC1M connector for input. **Size:** 2" w. x 4" d. x 4" h. Complete with instructions, diagrams, mounting screws.

Cesco "Original" Tel-O-Patch—Net Each.......... $14.95

"SUPREME" TEL-O-PATCH

Combination phone patch and transmit-receive control. For use with custom and commercial equipment. Undistorted voice reproduction at 100% modulation. For any receiver with output impedance of 500-5,000 ohms, and for high gain transmitter inputs (can be adapted to low gain). Separate On-Off control; standard phone jack output; Amphenol 75-PC1M mike connector input; Amphenol 4-contact plug and socket for transmit-receive control; reversible mounting plate. **Size:** 2" w. x 4" d. x 4" h. Complete with instructions, diagram, mounting screws.

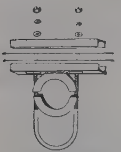
Cesco "Supreme" Tel-O-Patch—Net Each.......... $24.95

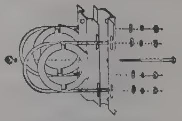
"REGENCY" TEL-O-PATCH

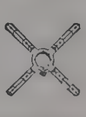
For use with units such as 32V-KW1-75A, Globe King, B & W, Ranger, Valient 500, or similar high quality equipment with push-to-talk operation. No modifying, ready for use. Eliminates feedback, hum, noise; voice reproduction undistorted at 100% modulation. For any receiver with 500-5,000 ohms output impedance and for high gain input; can be converted to low gain. Lever-action telephone type switch controls both transmitter and modulation; separate On-Off switch. **Size:** 2" w. x 4" d. x 4" h. Complete with 3' cord and 80MC2M plug, installation instructions, diagram, and mounting screws (mounting plate is reversible).

Cesco "Regency" Tel-O-Patch—Net Each.......... $24.95

ANTENNA MOUNTING AND MATCHING ACCESSORIES


"Oxen Yoke"


Boom Mounting


Quad Mount

"OXEN YOKE" BEAM ANTENNA CLAMP

For element sizes ¾" to 1½" in diameter and booms 1½" to 3" in diameter. All components are completely interchangeable, permitting element and boom selection to your requirements. For continuous or cut elements at center; all channel lock assembly. Always specify element size and boom size when ordering. Net Each.. $2.29

UNIVERSAL BOOM MOUNTING

For boom sizes 1½" to 3" in diameter and 1¼" or 1½" masts. Complete mounting consists of two mast plates (1¼" or 1½"), two boom yokes, two "U" bolts. Specify mast and boom sizes when ordering. Net Each........................ $5.95

QUAD MOUNT

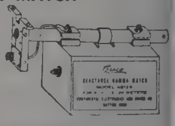
One-piece, durable, aluminum alloy cast spider for mounting quad arms to boom. Angle shaped spiders permit use of bamboo or aluminum tubing of 1" to 1½" diameter. Clamp-type, 2" diameter hub can be adjusted after assembly. Boom drilling not required. Net Each.............................. $6.95

HEAVY DUTY UNIVERSAL BOOM MOUNTING

(NOT ILLUSTRATED)

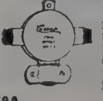
For water pipe or tubing mast, 2" to 3" O.D. All channel lock assembly. For single or stacked arrays. Consists of one mounting plate, four yokes and four "U" bolts. (Specify mast or pipe size when ordering.) Net Each........ .... $8.95

REACTANCE GAMMA MATCH



For matching unbalanced 6, 10, 15 and 20 meter coax lines to balanced antennas. Tune in five minutes. Gamma unit becomes part of gamma line. Will fit Cesco Oxen Yoke clamp; provision for mounting to boom with other clamps. Complete with instructions on installation and tuning. Net Each......... $14.95

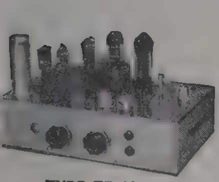
COAX DIPOLE DRI-FIT CONNECTOR

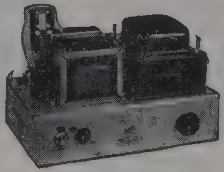


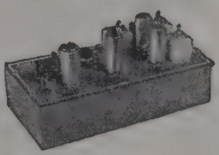
Ideal connector for dipole antennas. Completely moisture-proof, one-piece aluminum alloy construction. Handles power to maximum legal limits. Can be installed easily in a few minutes. For use with coaxial cables RG-8, RG-58, RG-11 or RG-59, or with 300-ohm twin lead. Has eye pull up for inverted V's, Weight, 2 oz. Net Each..... $2.95

ımateur Equipment, Crystals

TECRAFT TRANSMITTERS, CONVERTERS, POWER SUPPLY


TYPE TR-20


MODEL PTR-2


TYPE CC

TYPE TR-20 VHF TRANSMITTERS

llator employs standard Type FT-243 8 mc crystals in a Pierce
ıit. All models use a 12AX7 as a speech amplifier-driver and
6AQ5's as Class A modulators. Modulation transformers
nit use of audio for external accessory equipment. **Features:**
lo gain for either dynamic or crystal mike; provision for meter-
all stages; RF bridge circuit and rectifier allow RF output
ıitoring; antenna tuning system matches 52 or 72 ohm lines,
ınating in standard coax output connector; high level plate
ulation; each RF stage separately tuned (no broad-banded
ıits). Highly efficient Class C RF amplifier stage operates
ight through on output frequency—no frequency multiplica-
in final. Can be used as an exciter to drive high powered trans-
er; Class A modulators handle drive requirements of Class B
ulators. **Power Requirements:** Filaments, 6.3 v. AC/DC at
amps; 250 v. DC at 250 ma for full input. Can be operated at
er plate current levels to permit use of inexpensive power sup-
in mobile service. Permits 6- or 12-volt operation. Furnished
plete with crystal and tubes, tuned and air-tested, ready to
ate. **Size:** 9½″ x 5½″ x 5″ h. Shipping Weight, 5 lbs.

raft Model TR 20/50—6 meters. 20-25 watts input.
ıteur Net. **$59.95**

raft Model TR 20/144—2 meters. 20 watts inp. Net **$59.95**

raft Model TR 20/220—1¼ meters. 20 watts input. **59.95**

PTR-2 MATCHING POWER SUPPLY

ecially designed for use with Tecraft transmitters and con-
ers. Provides necessary filament and plate voltages. Con-
atively rated so as to stand up under continuous use. A send/
ve switch is incorporated to power the converter and disable
transmitter during listening periods; disables the converter
ı transmitting. **Ratings:** 6.3 volts at 6 amps; 6.3 volts at
ıps; 250 v. DC at 250 mils.

raft Model PTR-2—Matched power supply.
ıteur Net. **$39.95**

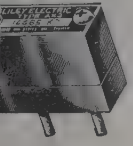
TYPE CC CASCODE CONVERTER

Allow your present receiver to function on the VHF and UHF bands. Crystal-controlled for high performance with any communications receiver. When connected to the antenna terminals it provides the finest reception and signal control—with low noise, extreme sensitivity, high gain and maximum stability. Adjustable RF gain to minimize cross modulation. A series tuned trap in the antenna input circuit limits I.F. feedthru. Rejection ratio better than 10,000:1. A .005% crystal provides maximum calibration accuracy. High frequency crystals permit low order of frequency multiplication resulting in greater freedom from spurious responses. Extensive shielding and L/C-R/C isolation of power wiring prevents coupling to local RF fields and interference therefrom. 52 or 72-ohm input—300 ohms with balun. **Noise:** 4 db; 1 µv will provide better than 20 db thermal quieting. **Sensitivity:** 1/10 µv for signal 6 db over noise level. **Gain:** More than 30 db. **Pass Band:** 4 mc, 6 mc at 6 db down. **Output:** IF output frequency should be chosen to suit the tuning range of receiver employed. For use with general coverage receivers, such as Hammarlund HQ 129X-140X, BC 348, BC 321, GPR 90, Hallicrafters, etc., choose 6-10, 7-11, 8-12, 10-14, 12-16, 14-18 mc. With Collins 75A4 or Hammarlund HQ 110, use 28-30. With 75A1 etc., use 26-30. With National HRO 50-60, use 7-11; with NC 300, use 30-35 mc. **Tubes:** 1-6BZ7, 2-6CB6, 1-6J6. **Power Input:** Filament, 6.3 v. AC/DC at 2 amps; 150-250 v. DC. Use in any position. All models complete with crystal, tubes, and input, output and power plugs. **Size:** 9½″ x 3″ x 4½″ high (less tubes). Shipping Weight, 5 lbs. **Specify IF frequency when ordering. K** indicates kit form.

Tecraft Model CC-50—50-54 mc for 6 meters.
Amateur Net. **$44.95**

Tecraft Model CC-108—108 mc, Satellite Tracking. Net. **$44.95**
Tecraft Model CC-120—CAP intercom, etc. Net. **44.95**
Tecraft Model CC-144 —144-148 mc; 2 meters. Net. . . . **44.95**
Tecraft Model CC-220 —220-225 mc; 1¼ meters. Net. . **44.95**
Tecraft Model CC5-50K—50-54 mc; 6 meters. Net. . . . **29.75**
Tecraft Model CC5-144K—144-148 mc; 2 meters. Net. **29.75**
Tecraft Model CC5-148K—CAP intercom, etc. Amateur **29.75**

BLILEY CRYSTALS


AX2

CF6

KV3

AMATEUR CRYSTALS

e AX-2. Dependable amateur crystals for application as listed
w. Code Nos. E17, E18 and E19 are supplied to integral spot
iencies (no fractions) as ordered; calibration is ±500 cycles
ctory test oscillator. Code No. E20 tolerance is ±10 kc. These
tals also are used with the Type CCO-2L Oscillator. All are
long x 1$\frac{1}{16}$″ wide x $\frac{7}{16}$″ thick; pin size .093″; pin spacing, .486″.

iiley le No.	Type	Application	Net Each
E17	AX2	1800-1825 kc	$3.75
E17	AX2	1875-1900 kc	3.75
E17	AX2	1900-1925 kc	3.75
E17	AX2	1975-2000 kc	3.75
E18	AX2	3500-4000 kc	2.95
E19	AX2	7000-7425 kc	2.95
E19	AX2	8000-9000 kc	2.95
E20	AX2	14-14.5 mc	3.95

100 KC CRYSTAL

ision crystal designed for use in secondary standards. Silver
ed; mounted between wire supports which are soldered to
ed surfaces. Adjusted to exactly 100 kc at 25° C when used
commended oscillator circuit.
y No. KV3—Net Each. **$8.50**

TV SERVICE CRYSTALS

Bliley					
No.	Type	Use	Tolerance	Frequency Range	Net Each
E2	SR10	TV	±.05%	*	$6.95
E3	MC9	Inter-Car.	±.02%	4.5 mc	3.95
E4	SR10	TV	±.05%	15-27.5 mc	8.50
E8	MC9	Sig. Gen.	±.02%	5 mc	3.95
E9	MC9	FM-IF	±.05%	10.7 mc	3.95

*State Channel, Channel Frequency.

1000 KC CRYSTALS

Bliley No. E11A—Type MC9 marker crystal. ±0.5%.
Net Each. **$8.00**

Bliley No. E11—Type MS433A reference crystal. 1000
kc, ±0.005%. Net Each. **$17.00**

465 SINGLE SIGNAL FILTERS

Exceptionally low holder capacity permits sharp discrimination in filter network of general communications receivers. Free from spurious internal noises. 455-456 kc, ±5 kc.

Bliley Model E14—Type CF3. Net Each. **$5.00**

Bliley Model E15—Type CF6. Net Each. **$4.50**

SPOT FREQUENCY CRYSTALS FOR NET OPERATION

Range 3-12 mc. Guaranteed to maintain frequency within ±0.03%. Specify frequency when ordering.

Bliley No. E22—Type MC-9. Net Each. **$6.50**

Bliley No. E22A—Type SR10. 12-27.5 mc experimental
frequencies. Net Each. **$8.50**

SPACE DOES NOT PERMIT LISTING THE COMPLETE LINE OF BLILEY CRYSTALS. PLEASE DO NOT HESITATE TO INQUIRE ABOUT UNLISTED OR NEW ITEMS.

James Millen Equipment

ANTENNA IMPEDANCE BRIDGE MODEL 90672

A sensitive, accurate instrument that measures impedances of 5 to 500 ohms at radio frequencies up to 200 mc. Easy to operate. Unknown impedance is plugged into antenna jack and knob adjusted for minimum reading on built-in meter. May be used to measure antenna radiation resistance, resonance, transmission line impedance, standing wave ratio, receiver input impedance and many others. May be used with baluns listed below.

Model 90672—Net Each....... $45.00

ANTENNA BRIDGE BALUNS

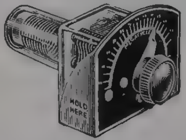
Auto-transformers for adapting from balanced to unbalanced lines and vice-versa. Accurate windings handle 500 volt peak (except No. 46672-80, takes 300 v.). Convenient for connecting balance impedance to antenna bridge (see above) or for feeding balanced line from unbalanced transmitter output. Stops all losses due to mismatch.

Type	Frequency Range, mc	Meter Band	Net Each
46672-15	21.0-21.45	15	$7.50
46672-10	26.96-29.7	10-11	
46672-20	14.0-14.35	20	
46672-40	7.0-7.3	40	
46672-80	3.5-4.0	75-80	

MILLEN TYPE 90711 VFO

A complete transmitter control unit with 6SK7 temperature-compensated oscillator, a 6SK7 frequency doubler, a 6A67 tuned amplifier, and a regulated power supply. Output sufficient to drive an 807 is available on 160, 80, 40 meters and reduced output is available on 20 meters. Solidly built so no frequency shift from vibration. Keying is free from all annoying chirp, quick drift, jump, etc. Complete with tubes.

No. 90711 Variable Frequency Oscillator—Net Each.................. $124.50

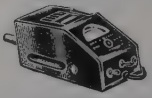


MILLEN FREQUENCY METERS

Compact midget units. Check harmonics, parasitics, oscillator-doubler, tank tuning, neutralize RF amplifiers, etc. Size 2⅜" x 1⅞" x 4". Shipping Weight, 10 oz.

Type	Range	Net Each
90605	3.0 to 10 mc	$ 7.50
90606	9.0 to 23 mc	7.50
90607	23 to 60 mc	7.50
90608	50 to 140 mc	7.50
90600	Complete set of above, in case	30.00

MILLEN GRID DIP METER



MODEL 9065

A calibrated stable RF oscillator unit wit a meter to read grid current. The fre quency determining coil is plugged into th unit so it may be used as a probe. Fre quency Range: 1.7 to 300 megacycles i seven overlapping ranges. Size of mete only (less probe): 7" x 3³⁄₁₆" x 3⅜". Come with 7 coils, coil rack and tube. Shpg. Wt., 3½ lbs. Net Each.. $61.5

Additional Inductors for Lower Frequencies

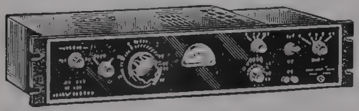
No. 46702—925 to 2000 kc. Net...$6.7
No. 46703—500 to 1050 kc. Net... 6.7
No. 46704—325 to 600 kc. Net... 6.7
No. 46705—220 to 350 kc. Net... 6.7

PHASE SHIFT NETWORK (NOT ILL.)

A complete and laboratory aligned pair c phase-shift networks in a single compac 2" x 1⁷⁄₁₆" x 4" case with characteristics so a to provide a phase shift between the tw networks of 90 degrees plus or minus 1, degrees over a frequency range of 22 cycles to 2750 cycles. This unit is equall well adapted for use in either single side band transmitting or receiving equipmen When used in a suitably designed trans mitter it is possible to obtain a 40 db sup pression of the unwanted sideband. Th No. 75012 precision adjusted phase-shi network makes possible the building c single sideband equipment without th necessity of complicated laboratory equi ment for network adjustment.

Model 75012—Net Each......... $9.7

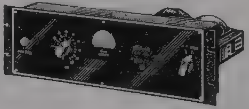
TVI SHIELDED EXCITER-TRANSMITTER MODEL 90801



New version of the well known Millen Exciter, including features and shielding for TVI reduction, bandswitching for the 4-7-14-21 and 28 mc. bands, and circuit metering. Conservatively rated for use either as a transmitter or exciter. 5763 oscillator-buffer-multiplier and 6146 power amplifier. 90 watts input for CW. Can be keyed in the oscillator and/or amplifier or by means of keyed external VFO such as the 90711. 67 watts input phone. Rack mounted. 3½" panel height.

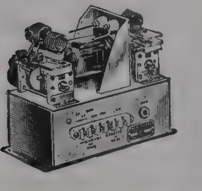
Model 90801—Less tubes. Net.. $75.00

MODEL 90831 MODULATOR



40 watt modulator designed especially for use with 90801 transmitter. Suitable for modulating transmitters up to 80 watts input. Gain is ample for the use of low level, high impedance crystal or dynamic microphones. Frequency response is adjusted for good communication intelligibility with limited side bands. 12AX7 speech amplifier, 6C4 voltage amplifier and Class AB1 6146's. Incorporates a switch for complete change-over of modulator and transmitter from CW to Phone. Rack mounted. 5¼" panel height.

Model 90831—Less tubes. Net Each.................... $60.00

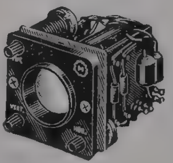


MILLEN TYPE 90811 HIGH FREQUENCY RF AMPLIFIER

A physically small unit capable of a power output of 70 to 85 watts on phone or 87 to 110 watts on CW on 20, 15, 11, 10, 6 or 2 meter amateur bands. Provision is made for quick band shift by means of VHF plug-in coils. Uses an 829B or 3E29 tube, with link coupled circuits into the grid and out of the plates. Terminal strip power supply connections. An efficient, ready-built RF Power Amplifier for high frequency use. Less Tubes.

No. 90811 High Frequency RF Amplifier—Net... $37.50

ONE INCH SCOPE MODEL 90901



Miniaturized, packaged panel mounting cathode ray oscilloscope designed for use in instrumentation in place of the conventional "pointer" type moving coil meters. Uses the 1" 1CP1 tube. Panel bezel matches in size and type the standard 2" square meters. Magnitude, phase displacement, wave shape, etc., are constantly visible on scope screen.

Model 90901—Less tube. Net.. $21.00

CATHODE RAY OSCILLOSCOPES MODELS 90902, 90903, 90905

The No. 90902, 90903, and 90905 Rack Panel Oscilloscopes, for two, three and five inch tubes, respectively, are inexpensive basic units comprising power supply, brilliancy and centering controls, safety features, magnetic shielding, switches, etc. As a transmitter monitor, no additional equipment or accessories are required. The well known trapezoidal monitoring patterns are secured by feeding modulated carrier voltage from a pickup loop directly to vertical plates of the cathode ray tube and audio modulating voltage to horizontal plates.

Model 90902—Less tubes. Net.. $55.00

Model 90903—Less tubes. Net.. $60.00

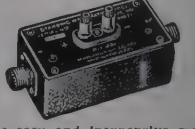
Model 90905—Less tubes. Net $125.00

TYPE 90881 RF POWER AMPLIFIER

Sturdy mechanical construction on a 10½ relay rack panel. This 500 watt amplifi may be used as the basis of a high powe amateur transmitter. Wired for use wit the popular 812A type tubes. Others ma be used. Plug-in inductors furnished fo 10, 20, 40 or 80 meter bands. With coils less tubes.

No. 90881 RF Power Amplifier—Less tubes. Net Each... $100.5

MILLEN TYPE 90671 STANDING WAVE RATIO BRIDGE

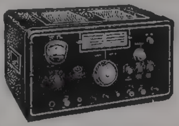


Provides easy and inexpensive measure ment of standing wave ratio on antenna using co-axial cable. The bridge is set u for 52 ohm line. A calibrated 75 oh resistor is mounted inside the case for sub stitution in the circuit when 75 ohm line used.

No. 90671 Bridge—Net Each........................ $16.8

B & W AMATEUR GEAR AND ACCESSORIES

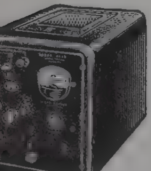
MODEL 5100-B TRANSMITTER



npletely self-contained. Offers mul-
ınd operation through 80-40-20-15-
10 meter amateur bands. Designed
radio-telephone-telegraph amateur
ımunication service; can also be
i on single sideband with Model
SB-B Generator. Bandswitched
ughout; permits choice of VFO or
stal control on all frequencies. Can
used to drive high-powered RF
lifier in class "C" or class "B"
ar service; well regulated driver for
unded grid class "B" linear. 75 watts of low-distortion audio
ver; can be used externally through 500-ohm line for driving
n-powered class "B" modulator.

ver Input: 140 watts phone, 180 watts CW/SSB. **Output Im-**
ance: 75 ohms unbalanced (52 ohms on special order). **Power**
rce: 115 v. AC, 50/60 cps single phase. **Frequency:** 80 meters:
-4.0 mc; 40 meters: 7.0-7.3 mc; 20 meters: 14.0-14.35 mc; 15
ers: 21.0-21.45 mc; 11 meters: 26.96-27.23 mc; 10 meters:
)-29.7 mc. **VFO:** Calibrated on all amateur bands. Separate
uitry for clear keying at all speeds on VFO and crystal. 64:1
r-driven dial can be read to 1 kc increments on all bands.
stal: 80 meter crystals for all-band operation. **RF Section-**
ltiplier-Amplifier: Multiplier consists of 4-6AQ5 tubes, gang-
ed. Adjustable excitation to final amplifier. Output of pi-net-
k final amplifier circuit fed to antenna connector through low
s filter with extreme attenuation through entire TV spectrum.
ech Amplifier-Modulator: Consists of 6U8 followed by 6AQ5
ing 2-6146 functioning as class AB2 modulators. Ample audio
ver for 100% modulation of transmitter output at maximum
ver on AM. Audio power can be used to drive higher powered
lulator unit. **CW Operation:** Bias system provides complete
-off of final amplifiers under key-up conditions. Along with
ring and bypassing critical circuits in the buffer amplifier, this
uces the free running VFO back wave to a level permitting
ak-in operations on all frequencies. **TVI Suppression:** RF sec-
designed to eliminate much of TVI. Careful shielding, filter-
and by-passing reduces radiation from wires coming out of
inet. **Power Supplies:** All transformers and components con-
atively rated. Adequate capacity to provide filament and plate
ages for Model 51SB-B. Primary tap switch wired in high
age supply to compensate for low and high line voltages.
es: 1-6BH6, 2-6BJ6, 5-6AQ5, 4-6146, 1-6U8, 1-5U4GB,
R4GY, 1-VR150/OD3. **Size:** 22″ wide, 11½″ high, 14¾″ deep.
, Weight, 88 lbs.
W Model 5100-B Transmitter—Net Each..... $\$525^{00}$

ODEL 51SB-B SINGLE SIDEBAND GENERATOR



Companion to the 5100-B, this completely bandswitched SSB generator bolts right onto the transmitter housing. No test equipment or conversion required. **Features:** Voice-operated control, push-to-talk, speaker deactivating circuit, unitized construction, hinged top cover. Microphone only accessory needed. Draws power from Model 5100-B. Covers AM, CW or SSB by the flip of a switch on the transmitter panel. Disassembles into three major subassemblies: RF Unit, Audio Unit, Chassis. **RF Input Characteristics:** Frequency—same as desired output; Impedance—50 ohms, all bands; Voltage—1.5-2.0 v. rms. **RF Output Characteristics:** Frequency—same as input; 75 v. peak
put, into impedance of 1500 ohms or more. Takes either a
stal or a dynamic microphone. **Tubes:** 9. **Size:** 11½″ h., 10″ w.,
4″ d. Complete with tubes, hardware and instructions.
W Model 51SB-B Single Sideband Generator— $\$265^{00}$
Each..

MODEL 380B T-R SWITCH

vides fully automatic electronic antenna changeover from radio
eivers to transmitters and vice-versa, for all power applications
to the legal limit. Ideal for voice-operated SSB, AM phone,
ak-in CW—all with one antenna. Ends annoying antenna
ngeover relay chatter. Gain varying from 6 db at 3.5 mc to 0 db
0 mc is realized on reception. Transmitting power loss is virtu-
unmeasurable. Broadband circuitry eliminates tuning or ad-
tment. Protects final amplifier, low-pass filter, etc. Load always
pled to transmitter.
W Model 380B T-R Switch—Net Each.......... $\$23^{70}$

TYPE 2Q4 AUDIO PHASE SHIFT NETWORK

octal based audio phase shift network designed for single side-
d suppressed carrier radio-telephone receiving and transmitting
lications. Will split any audio signal from 300 to 3,000 cps into
equal amplitude components, 90° ± 1.5° out of phase with
pect to each other. Highly compact; needs no more space than
J5 tube.
W Model 350-2Q4 Network—Net Each........... $\$4^{85}$

NEW MODEL LPA-1 LINEAR AMPLIFIER

Reliable table-top model. Full kw grounded grid linear amplifier featuring clean design that eliminates unnecessary circuits while providing all the essentials for SSB and CW. Flexible pi-network output circuit (50-75 ohms) provides for precise adjustment of tuning and loading of bands from 80 through 10 meters; full band switching. Broad-band input uses a broadbanded input circuit so as to require no tuning. **Power:** 1 kw at 115 v. AC, single phase. **Power Input:** 1000 watts DC input on CW and SSB; Linear AM phone, 375 watts. **RF Circuits:** Input, 50/75 ohms unbalanced (broadbanded); output, 50/75 ohms unbalanced (tuned pi-network). **Emission:** CW, SSB and AM phone. **Tubes:** 2-813. **Size:** 18¼″ wide, 16″ deep, 9¾″ high. Weight, 47 lbs.
B & W Model LPA-1 Amplifier—Net Each......... $\$375^{00}$

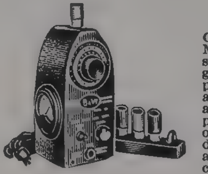
B & W Model LPS-1 Power Supply: For use with LPA-1 amplifier. Comes in separate cabinet, complete with tubes and interconnecting cable. Operates on 115 v. AC 60 cycle single phase. **Power Consumption:** 1.4 kw under full load, 1 kw input. **Output:** 2500 v. DC at 400 ma full load. **Tubes:** 4-816 mercury vapor rectifiers. **Size:** 17″ wide, 14″ deep, 8″ high. Wt., 50 lbs.
B & W Model LPS-1—Net Each................. $\$205^{00}$

Model LPA-MU Matching Unit: Small and compact bandswitching assembly, comes with all fittings and mounting hardware.
Net Each..**$36.00**

MODEL 550A MULTI-POSITION COAXIAL SWITCH

This inexpensive, multi-position coaxial switch permits you to select antennas, transmitters, exciters, receivers and other RF generating devices using 52- or 75-ohm coaxial line, without any need for the fumbling and annoyance of screwing and unscrewing connections. The Model 550A permits instant selection of any one of five transmitters, etc. It will handle up to 1 kw of modulated power with a maximum cross-talk of −45 db at 30 mc.
B & W Model 550A Switch— $\$8^{25}$
Net Each...............

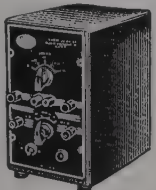
B & W Model 551A Multi-position Coaxial Switch—A two-pole, two position unit for switching various devices using 52 or 75 ohm coaxial lines in or out of series connection. May also be used to switch low impedance coupled power amplifiers in or out of circuit, permitting the driver stage to be connected to a low impedance antenna circuit or similar load as may be necessary.
B & W Model 551A Switch—Net Each................ $\$7^{95}$



MODEL 600
GRID DIP METER

Covers 1.75 to 260 mc in 5 bands. Monitoring jack and B+OFF switch. Shaped for use in hard-to-get-at places. Sturdy, color coded, plug-in coils. Adjustable, 500 microamp meter. This highly sensitive and accurately calibrated multi-purpose meter is an invaluable lab or ham aid. Can be used as a grid dip oscillator, signal generator or absorption wave meter. A self-contained power supply operates from 110 volts AC.
B & W Model 600 Meter—Net Each................ $\$45^{72}$

MODEL 404
LINEAR DETECTOR



Provides RF detection and audio bridging circuits. A valuable aid to distortion meters lacking these features for measuring distortion or noise in AM circuits. Includes bridging transformer, vacuum tube rectifier, 40 db pad adjustable in 10 db steps, and function selector switch. 20 to 30 volts RF carrier is sufficient for operation throughout range of 400 kc to 30 mc. Impedance: Single-ended input, approx. 10,000 ohms. As bridging transformer, approx. 6,000 ohms. Insertion loss: approx. 1 db. Frequency response is flat from 20 to 50,000 cycles.
B & W Model 404 Detector—Net Each............ $\$105^{00}$

PI NETWORK INDUCTOR ASSEMBLIES

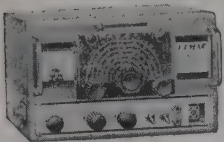
One kw high power, integral bandswitched tank coil for highly efficient operation from 80 through 10 meters. For Class "C" or linear operation using triodes or tetrodes in conventional or grounded grid circuits. Windings provide ample current carrying capacity; minimum "Q" of 300 over the entire operating range.
B & W Model 850A Inductor—
Net Each.. $\$35^{00}$

B & W Model 851 Medium Powered Bandswitching Pi-Network Inductor Assembly—An ultra-compact, highly efficient, integrally bandswitched unit, designed for single or parallel tube operation from 80 through 10 meters. **Ratings:** SSB and CW—2000 v. DC @ 250 ma input; AM—1250 v. DC @ 200 ma input; minimum "Q"—300. Size, 7″ long, 3″ wide, 3½″ high.
B & W Model 851 Inductor—Net Each.............. $\$16^{50}$

Amateur Equipment, Accessories

MULTI-ELMAC AMATEUR EQUIPMENT

AF-67 TRANS-CITER



Designed as an exciter, speech amplifier, VFO, driver or a complete low-powered transmitter for under-dash mobile installation. **Emission:** A-1 NBFM or A-3. **Seven Bands:** 1.75-2.00, 3.50-4.00, 7.00-7.30, 14.00-14.35, 21.00-21.45, 26.96-27.23 (Xtal only), 28.00-29.70 mc. **VFO or Crystal:** Temp. compensated VFO operates on 1.75 mc for the 160-80 meter bands and 3.5 mc for all others. Untuned crystal oscillator for any crystal working straight through, double or quadruple desired frequency. Socket holds 2 crystals. **Power:** Max. 60 watts to plate of final tube with an output efficiency of 70-80%. 15 prong power plug used so set may be operated on 6 or 12 volts AC-DC by using jumper across pin terminals. Power input supply 350-500 volts @ 170 ma and 225 volts @ 60 ma. **Controls:** Bandswitch Lever, Final Loading, Plate Tuning, Grid Drive, Power Switch, VFO Spotting Switch, Meter Switch, VFO Frequency Control, VFO or Crystal Switch, Audio Gain; REAR APRON: AM-NBFM-CW Switch, High or Low Impedance Microphone Switch. **Output Circuit:** Coaxial connector and universal P1 matching network. 40 watts of audio at 500 ohms to drive higher powered modulators, etc., plus various combinations of output. **Metering:** 5 circuit meter switch provides readings of Grid Current-PA off, Grid Current-PA on, Plate Voltage, Final Plate Current, Modulator Plate Current. **Tubes:** 6146 Power Amplifier, 6AQ5 Driver, 6AG5 Multiplier, 6AK6 Oscillator (VFO or Crystal), 6BJ6 Reactance Modulator, OB2 Voltage Regulator, 6AU6 Speech Amplifier, 12AU7 Speech Driver, 2-5881 Modulators. **Size:** 11¼″ wide x 8½″ deep x 7″ high. Gray hammertone finish. Weight, 18 lbs.

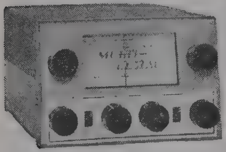
Multi-Elmac Model AF-67 Transmitter—Net Each. $177.00

ACCESSORIES

CFS-1 Cable—Complete cable, plug and fanning strip to connect the PS-2V to the AF-67 Trans-citer. Net Each..........**$4.75**

PTR-1 Kit—Includes rectifier, relay and filter condenser to allow "Push-to-talk" operation of your station from an AC supply. Net Each..**$6.75**

MODEL PMR-7 RECEIVER



Newly designed receiver with improved sensitivity, selectivity and signal-to-noise ratio. Illuminated slide rule dial for ease of tuning. **Seven Bands:** 10, 15, 20, 40, 80 and 160 meters and Broadcast 540-1650 kc. **Dual Conversion:** Crystal controlled. 2238 kc 1st IF; 262 kc 2nd IF. Also features built-in noise limiter, adjustable squelch operating on 0.5 µv., variable BFO with injection for ease of copying SSB signals, RF gain control and tuned RF stage preceding 1st converter on each band. Delayed AVC permits tuning in weak signals. Sensitivity and noise figure exceeds many fixed-station-type receivers. Oscillator is voltage regulated and temperature compensated. Filament string operates from either 6- or 12-volt power supply. Antenna input for 50- to 75-ohm line. **Tubes:** 1-6BZ6; 1-6BE6; 1-6C4; 1-6BA6 (2238 kc); 1-6X8; 1-6BJ6 (262 kc); 1-6BJ7; 1-6AN8; 1-6AQ5; 1-12AU7. Coils are individually shielded. Jack for headphone. Cabinet finished in hammertone gray. **Size:** 7″ wide x 9½″ deep x 4½″ high.

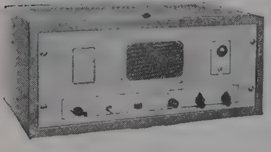
Multi-Elmac Model PMR-7 Receiver—Shipping Weight, 11 lbs. Net Each........................ $159.00

POWER SUPPLIES FOR PMR-7

Multi-Elmac Model PSR-612—For 6- or 12-v. DC input. With cable and connector for PMR-7. Net Each. $34.00

Multi-Elmac Model PSR-117—For 117-volt AC input. With "S" Meter and connecting cable for PMR-7. Net. $47.00

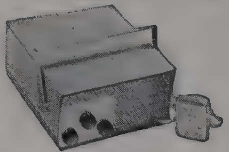
CM-1 CONELRAD MONITOR



A Conelrad monitor receiver that is not merely a carrier monitor. Provides reliable monitoring without false indications in the event of normal station shut-down or carrier breaks. Alarm circuit operates only when a carrier break of 5 seconds' length is followed by a 1000 cps tone modulated carrier for 15 secs. Fail-safe design with indicator light when any component in IF or RF stages fails. **Six Channels:** 640 kc, 1240 kc, and 540 to 1600 kc crystal controlled; 540 to 1600 kc adjustable. **Conelrad Alarm:** Lights indicator; activates speaker at a preset level; will close a set of relay contacts; and locks in the alarm circuit until manually reset. Any channel may be monitored audibly at any time without disturbing the alarm feature. **Sensitivity:** 5 µv audio, 8 µv alarm. **Selectivity:** ±3 kc down 6 db; ±15k c down 40 db. **Audio Output:** 1 watt into panel speaker; provision for external speakers. **Output Impedance:** 3.2 ohms. **Antenna Input:** 72 ohms unbalanced **Power Supply:** Self-contained, 60 watts, 115 volts, 60 cps. **Size:** 20½″ w. x 11″ d. x 8½″ h. Blue wrinkle cabinet with smooth gray panel. Panel is standard size for rack mounting. Shipping Weight, 33 lbs.

Multi-Elmac Model CM-1 Conelrad Monitor—Net. $140.00

CD-5 CITI-FONE® 2-WAY RADIO



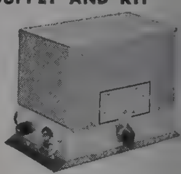
Provides rugged, precision built dependable two-way radio station operation for new Class "D" Citizens Band of Frequencies Operates on any 5 of the 22 channels available by selection from front panel control. Transmitter and receiver crystal controlled with .005% tolerance Additional crystals for transmitter and receiver available for operation on more than one frequency; crystals easily inserted into crystal holders with no retuning necessary. Built-in noise limiter and squelch control. AM modulated transmitter has 5-watt input; 9-tube superhet receiver. **Tubes:** 6BJ6 RF amp., 2-6BJ6 IF amp., 6AL5 Detector noise lim., 6AQ5 audio output/Modulator, 12AU7 crystal oscillator, 6BE6 mixer, 6AN8 AF amp./squelch, 6AQ5 power amp. Complete with microphone, power cords, cigarette lighter plug, two crystals for one channel. **Size:** 8″ w. x 11″ d. x 4¼″ h. Weight, 12 lbs.

Multi-Elmac Model CD-5/6 Citi-fone—Specify blue or gray. For 6 v. DC, 110 v. AC. Net Each......... $124.50

Multi-Elmac Model CD-5/12 Citi-fone—Specify blue or gray. For 12 v. DC, 110 v. AC. Net Each........ $124.50

Multi-Elmac Model ASP-185 Clamp Antenna—For CD-5. Snaps on automobile rain gutter. With 12′ RG-58/U cable. Net. **$15.40**

AC-DC MOBILE POWER SUPPLY AND KIT



Vibrator power supply for amateur mobile or fixed service. Operates on 6 or 12 v. DC by changing taps on transformer or from 110 v. AC. Uses vibrator and high efficiency silicon rectifiers. Will easily power both AF-67 transmitter and PMR-7 receiver. Replaces M-1050, M-1051, M-1470. **Typical Output:** 500 v. at 250 ma, 250 v. at 75 ma and 105 v. regulated. **Efficiency:** 70% conversion. **Size:** 5″ w. x 8″ d. x 6″ h. Weight, 10 lbs.

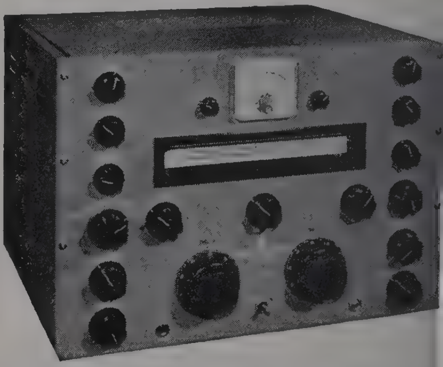
Multi-Elmac Model M-1070 Power Supply—Wired and tested. Includes cord and plugs. Net Each.................................. $69.50

Multi-Elmac Model M-1071 Power Supply—Kit form. Net Each.. **49.50**

COSMOS HAM X'CEIVER

THE COSMOPHONE "35"

A COMPLETE S.S.B. STATION



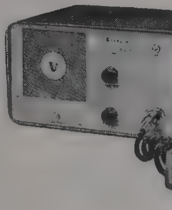
The Cosmophone "35" is a dual channel bilateral receiver-transmitter permitting the utmost in flexibility during SSB operation. **Tuning:** The unit may be used as either a transceiver or as a separate receiver-transmitter combination, providing the convenience of transceiver operation, plus the flexibility of being able to receive and transmit on separate frequencies. This is accomplished by the use of a dual tuning control. **Transmits or Receives** on 10, 11, 15, 20, 40 and 80 meter bands with one knob band switching. Transmits or receives SSB suppressed carrier (upper or lower), SSB with carrier or C. W. Peak-null "Q" Multiplier. **Receiver Sensitivity:** One microvolt at 6 db S/N ratio. **Single 6146 output.** Built in VOX and QT. 40 db suppression. 3.1 kc mechanical filter for transmission and reception. Dual speed tuning knobs with ratios of 20:1 and 100:1. **Meter indications** for RF output, final grid or plate current and receiver signal strength **Dimensions:** 17″ wide x 15″ deep x 12″ high.

Model Cosmophone "35"—Less power supply. Net.. $799.50

Model P35 Power Supply—6.3 v. at 13 amps., 600 v. at 100 ma, 300 v. at 160 ma, 210 v. regulated at 45 ma, −150 v. regulated at 25 ma. Net Each..............................**$139.50**

Vocaline Transceivers, Intercoms

NEW MODEL ED-27 "COMMAIRE" CLASS D TRANSCEIVER


ED-27

Highly selective, two-way Citizens' Band radio for base, mobile and marine use features extra clear transmission, virtually interference-free reception, high sensitivity and exclusive, patented squelch to eliminate noise. Transistorized power supply holds drain to minimum; will not blow if reverse polarity is applied. Crystal controlled operation. Double conversion superheterodyne receiver has 0.1 µv sensitivity; "Silent-Aire" squelch; ± 5 kc selectivity at points 6 db down; 4.5 watts output. Transmitter is extra efficient with high modulation; delivers 3 watts output on 5 watts input. Controls include volume/on-off, squelch adjust/on-off, mike jack, pilot light and transmit indicator (also used as antenna load with screwdriver adjustment at rear of set). Comes complete with AC and DC line cords, pushbutton mike and cord, short range antenna, 27.105 mc crystal and mobile mounting brackets. Accessory long range antennas for mobile, base or marine coax sleeve type, or portable 4-ft. loaded whip operation.

SPECIFICATIONS: Range: 1-5 miles mobile; 3-10 miles mobile to base; 5-10 miles open water marine; 5-15 miles marine to shore when used as recommended. **Tubes:** 10. **Power Required:** 115 v. AC and 6 v. DC; or 115 v. AC and 12 v. DC (specify). **Size:** 5" x 9" x 7½" d. Weight, 11½ lbs.

Vocaline Model ED-27 "Commaire" Transceiver—Net Each.... $143.60

Vocaline Model XD-1 Crystal—Calibrated for "Commaire" (other brands may violate FCC regulations when used in "Commaire"). Specify frequency. Net Each.... $ 3.60

Vocaline Model CVB Mobile Antenna—With 15′ cable; 93" long. Net Each.... 22.00

Vocaline Model CVM Mobile Antenna—Same as CVB, for fender mount. Net Each.... 23.60

Vocaline Model DVB-42 Mobile Antenna—With 15′ cable; 102" long. Net Each.... 15.80

Vocaline Model DVM-32 Mobile Antenna—Same as DVB-42, for fender mount. Net Ea. 16.80

Vocaline Model DVT-581 Mobile Antenna—40" long, cable included. Net Each.... 13.80

Vocaline Model DVP-36 Antenna—40" base-loaded portable whip. Net Each.... 7.40

Vocaline Model CVX Base Antenna—Net Each.... 36.80

Vocaline Model M-15—15′ cable for CVX; for marine use. Net Each.... 5.56

Vocaline Model B-50—50′ cable for CVX; for base station. Net Each.... 8.76

MODEL JRC-400 CITIZENS RADIO TRANSCEIVER

JRC-400

The first low-priced, two-way radio that everyone can afford. Any U.S. citizen over 18 years of age may obtain a station license—no operator's license is required. To use, just plug the rugged, lightweight units into any 115 volt AC outlet or 6 volt DC supply and press the convenient push-talk switch; then speak into the hand-sized microphone. No tuning, no adjustments. Each JRC-400 unit is a complete miniature radio station comprising both transmitter and loud-speaking receiver in one, operating in the ultra-high frequency region of the radio spectrum. In this range, the radio waves behave almost like rays of light; thus, best operation is obtained by using "line-of-sight" operation at distances of up to 10 miles. Under a half-mile, satisfactory communication can be obtained even when buildings or other obstructions are interposed between the units.

The Transceiver operates as a superregenerative receiver and amplitude-modulated oscillator for transmitting at 465 mc. A special wide-band receiver circuit is used so that when both stations are operating within FCC limits, no receiver tuning is needed. A remote antenna is available for use where the Transceiver cannot be placed in an open, clear location. Two line cords are furnished with each unit: One equipped with a standard line plug for regular AC use; the other with connector for attaching to a 6-volt battery. To change from one line cord to the other, just unplug the one in use and plug in the other. Also available for 12 v. DC and 115 v. AC.

SPECIFICATIONS: Frequency: 465 mc. **RF Power Input:** 2 watts. **Power Output:** ⅛ watt. **Power Consumption:** 18 watts AC. **Tubes:** 1-6AV6, 1-6AS5, 1-6AF4A. **Controls:** Volume/Off; Talk-Listen. **Size:** 9" x 6" x 5" **Weight:** 4 lbs.

Vocaline Model JRC-400 Radio Transceiver—Pair for complete system. Net Pair.... $119.60

Vocaline Model JRC-400 Radio Transceiver—One only. Net Each.... $59.80

Vocaline Model JRC-425 Radio Transceiver—Complete with stainless steel microphone with push button control, and earphone jack; AC and DC line cords and plug-in antenna. Pair for complete system. Net Pair.... $167.60

Vocaline Model JRC-425 Radio Transceiver—One only. Net Each.... $83.80

Vocaline Model AD-3 Directional Antenna—When well elevated, gives equivalent output of up to 30 watts; talk up to 40 miles. Improves range in normally difficult locations. Net Each. $18.71

Vocaline Model GP4-10 Ground Plane Antenna—With 10′ RG-58U cable. Net Each.. 5.96

Vocaline Model GP4-15 Ground Plane Antenna—With 15′ RG-58U cable. Net Each.. 6.71

Vocaline Model GP4-20 Ground Plane Antenna—With 20′ RG-58U cable. Net Each.. 7.46

Vocaline Model GP5-50 Ground Plane Antenna—With 50′ RG-58U cable. Net Each.. 18.71

Vocaline Model AEA-12 Aluminum Extension Aerial—Telescopes 4-12 ft. with ground plane antenna and 15 ft. of lead. Solid ground spike doubles as handle Net Each.... $18.71

Vocaline Model LCX-1 Carrying Case—For transceiver and accessories. Simulated leather. Net Each.... $14.96

CUB-1/MT-1 REMOTE CONTROLLED CITIZENS BAND TRANSCEIVER

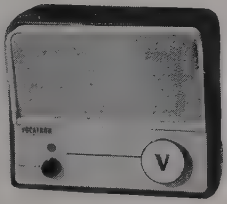
MT-1

Transceiver designed to eliminate signal losses incurred when operating Series JRC Transceivers with a base station antenna. Full power delivered to antenna built into the remote transceiver. CUB-1 control unit (similar in appearance to JRC-400) may be placed up to 500 feet from the MT-1 transceiver. Transceiver may be mounted as high as possible for maximum performance. Supplied with 100 feet of 6-conductor cable. Up to 400 feet may be added if required. Microphone with transmitting switch supplied.

SPECIFICATIONS: Frequency: 465 mc. **RF Power Output:** 325-400 mw. **Audio Output:** 2 watts. **Power Consumption:** 18 watts (117 v. AC only). **Tubes:** 1-6AF4A, 2-6AV6, 1-6AS5, 1-6BY6, 1-NE-51. **Controls:** On/Off; Volume; Squelch On/Off; Squelch Sensitivity; Transmitting (microphone). **Size: CUB-1,** 9" x 6" x 5³⁄₁₆"; **MT-1,** 7" x 4½" x 2½". **Ground Plane Radius:** 7⅛". **Weight: CUB-1,** 5 lbs., 14 oz. **MT-1,** less cable, 2 lbs.; 100 feet cable, 3 lbs., 4 oz.

Vocaline Model CUB-1/MT-1 Citizens Band Transceiver—Net Each.... $143.60

MODEL CC-60 WIRELESS INTERCOM


CC-60

Smartly styled, compact unit features simplicity of operation, patented noise squelch, fingertip control. Plugs into standard outlet; no wires needed. Just push a button and talk. **Size:** 8" x 3" x 6" h.

Vocaline Model CC-60—Net Per Pair.... $81.76

Vocaline Model CC-60—Single unit. Net Each.... $40.88

MODEL CC-3 TWO-WAY WIRELESS INTERCOM SYSTEM

Portable intercom requiring no special connecting wires; just plug into standard outlet, press button and talk. All units turned on hear the call of any unit transmitting; all units can originate calls. The regular electric power and lighting circuits are used as the transmission medium: Operating on the "carrier-wave" principle, a small high-frequency signal voltage acts as the carrier and is placed on the 110 v., 60 cps. power line which takes it from one unit to any others. **Frequency:** 175 kc; may be altered for privacy. **Power Required:** 23 watts, 105-125 v., 25-60 cps, AC/DC; pilot light indicates when power is on. **Switch Functions:** Permanent Talk (Up); Listen (Center); Temporary Talk (Down). Walnut cabinet; for Ivory, add **$1.88** per unit. **Size:** 7¾" w. x 5⅝" d. x 5⅞" h. Weight, 4 lbs. U/L Approved.

Vocaline Model CC-3—Net Per Pair.... $67.48

Vocaline Model CC-3—Single unit. Net Each.... $33.74

MODEL CC-45 LONG-RANGE WIRELESS SYSTEM

Similar in appearance to CC-3 (except for molded-on carrying handle) and specifications, except as follows. **Frequency:** 175 kc; cannot be altered. **Power Required:** Same, but can be adapted to higher voltages. **Tubes:** (6) 3-2AU6, 2-35C5, 1-35W4. **Size:** 6⅞" h., including handle. Weight, 4 lbs., 2 oz. U/L and CSA Approved.

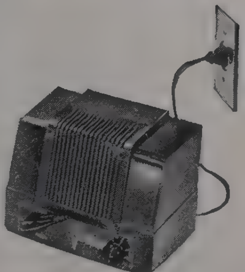
Vocaline Model CC-45—Net Per Pair.... $74.62

Vocaline Model CC-45—Single unit. Net Each.... $37.31

MODEL CC-201TR AUTOMATIC WIRELESS SYSTEM

Similar in appearance to CC-45. Needs no switching at remote station to talk or listen. Designed for use where it is inconvenient for the operator to work a switch.

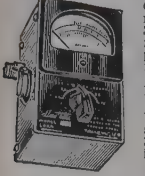
Vocaline Model CC-201TR—Single unit. Net Each.... $41.82


CC-3

Amateur Equipment, Accessories

M. C. JONES VSWR AND RF POWER MEASURING EQUIPMENT

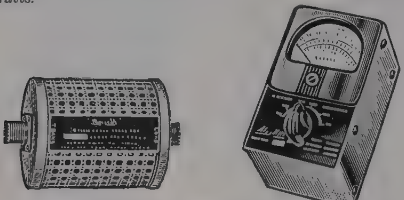
VSWR AND RF WATTMETERS



Coupler, equipped with type N and UHF connectors. Indicator calibrated directly in watts, 3 scales, 30, 75, and 300 watts. 5% accuracy maintained on reading incident or reflected power. Frequency range is from 25 to 1000 mc. **Size:** 3 1/16" x 5⅝" x 3". Weight, 2 lbs.
Model 711N Coupler-Indicator—Net Each.................... $135.00

Very similar to the 711N in appearance, usage and size. Uses type N and UHF connectors, 3 scales, 2.5, 5 and 10 watts. Frequency range is from 25 to 1000 mc.
Model 712N Coupler-Indicator—Net Each.................... $135.00

The Micromatch 260 Series is a compact, dual type sensitive instrument for measuring RF power and standing wave ratio in the frequency range from 0.5 to 225 mcs., at power levels up to 1000 watts. It measures both incident and reflected power without the necessity of removing the coupler from the line and reversing its connections. There are three distinct models available. Model 261 is a Coupler Unit ONLY, equipped with UHF type RF connectors. Model 262 is an Indicator ONLY. Model 263 consists of Model 261 (but with type N connectors), and an Indicator calibrated directly in watts.



MODEL 263 COUPLER-INDICATOR

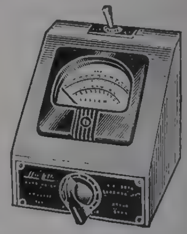
Complete instrument consisting of a coupler, equipped with type N connectors, and an indicator calibrated directly in watts. Equipped with 3 scales, 10, 100 and 1000 watts full scale for both incident and reflected power. Selector switch allows readings of incident and reflected power on any of the 3 scales. For example, it is possible to read the RF power output of the transmitter or the incident power on the 1000 watt scale and the reflected power on the 10 watt scale. Provides accurate method for obtaining a perfect match or a Unity standing wave ratio. **Size:** Coupler, 3" x 3" x 5"; indicator, 3" x 3" x 5 5/16". Weight, 2 lbs., 4 oz.
Model 263 Coupler-Indicator—Net Each............. $85.00

MODEL 261 COUPLER UNIT

(ILLUSTRATED WITH INDICATOR ABOVE)

Capable of supplying reading of incident RF power, reflected RF power, net RF power supplied to the antenna or load, and VSWR of the load. Once the coupler has been inserted in the line it is not necessary to remove or reverse its position in the line to obtain any of the above readings. The coupler may be left in a matched RF transmission line at power levels up to 1 kw continuously without damage to the coupler unit. Complete easy to follow instructions to build a 262 indicator supplied with each 261 coupler. **Frequency Range:** 0.5 to 225 mc. **Impedance:** 52 ohms. **Power Rating, Continuous:** 1000 Watts. **Reflection Coefficient:** Less than 0.5 db. **Power Loss Through Coupler:** Less than 0.1 db. **Directivity:** More than 20 db. **Size:** 3" x 3" x 4¾".
Model 261 Coupler Unit—Net Each................. $22.50

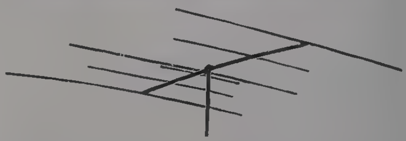
MODEL 262 INDICATOR



Simplified type of indicator reading relative power. Sensitivity continuously adjustable from approx. 10 watts full scale to approx. 1000 watts full scale by means of the potentiometer mounted on the front panel. Selector switch allows readings of either incident or reflected RF power. Net power to the antenna or load and VSWR of the load may also be obtained from these readings with any of the Model 261 coupler units. **Size:** 4¼" x 4¼" x 4 5/16".
Model 262 Indicator—Net Each......... $14.50

Other models available for use at frequencies to 3000 mcs and power levels to 120 kw.

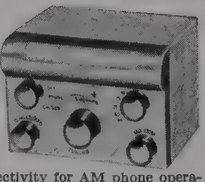
FREDERICK TOOL AND ENGINEERING THREE-BAND BEAM ANTENNA



A multiband parasitic array using parallel resonant traps in series with the elements for automatic switching. Completely eliminates the need for stacked arrays. Covers 10, 15 and 20 meter bands. Clean design, shortened elements, results in a decrease in wind resistance and very light weight; only 55 lbs., including rugged 2¼" diam. boom. Unique design permits ready access to all parts of the beam from the tower. Wide beam balancer affords perfect pattern symmetry with coaxial feed line; no adjustment required. Wide spacing provides excellent gain and directivity over entire range of each band. **Maximum Gain:** Over 8 db on 20 and 15 meters; somewhat higher on 10 meters. **Front-to-Back Ratio:** 30 db on 10/15/20 meters. Dipoles differ from conventional ones in that conventional insulators have been replaced by resonant trap circuits, increasing impedance at resonance with very little change in operating characteristics. The three major elements of the antenna are provided with two sets of traps each. Two additional ten meter elements are inserted between the three band elements to maintain proper spacing and permit broadbanding. **Construction:** All tubing is of 6061-T6 heat-treated aluminum, to allow for high strength and weather resistance. Boom consists of two 12 ft. lengths of 2¼" dia. tubing with .1056" wall. Three-band elements are made of 1½" tubing with .058" wall. Units come complete with hardware, assembly instructions, and prints. Guaranteed to stand one kilowatt and for 1 (one) year for any defects in material or workmanship.
Frederick Tool & Engineering Model FT-100—Net. $219.95

Model FT-200 Traps—For 5-band operation on 10, 15, 20, 40, and 80 meters (75 ohm feed line). Net Pair................**$12.50**

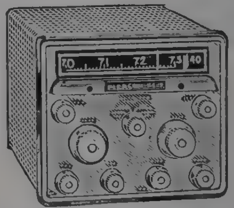
REGENCY ATC-1 BAND CONVERTER



The first and only transistorized amateur band converter. Extremely compact: only 4¾" x 3¼" x 4 1/16"; weight, 30 oz. Completely self-powered by three tiny penlight cells. Can be used anywhere: at home, in the car, in your boat, etc. Operates between antenna and receiver's antenna input. In spite of small size it provides excellent power and sensitivity on AM, CW and SSB at 80, 40, 20, 15, and 10 meter amateur bands. A simplified "Q" multiplier circuit improves sensitivity and selectivity for AM phone operation. Dial is drum type operated by band switch. All coils are permeability tuned by high "Q" cores; readily accessible from the back. A jack is provided to disable converter during transmission. **Controls:** Band switch and dial selector; function switch—Off/Phone/CW/SSB; "Q" multiplier and beat oscillator control; antenna trimmer; tuning knob and dial light switch. **Sensitivity:** 5 to 10 μv for 6 db signal to noise ratio. **Current Drain:** 450 to 600 μa for life expectancy approaching battery shelf life. **Transistor Complement:** SB-100 high frequency surface barrier serves as converter; 2N172 junction type serves as "Q" multiplier or beat frequency oscillator; for phone, the 2N172 works as simplified "Q" multiplier; for CW, the 2N172 acts as B.F.O., having variable injection voltage for best reception. A type CK706 diode is used as a clamp to prevent overload to transistors due to extremely high level of nearby transmitters.
Regency Model ATC-1 Band Converter—Net Each... $79.50

AUTOMATION ELECTRONICS RECEIVER AND ACCESSORIES

PIERSON KE-93 RECEIVER



A tiny 12-tube precision mobile or fixed communications receiver. Covers 10, 15, 20, 40, 80, 160 m. and broadcast band. New noise suppression circuitry. Rigid, die-cast construction. RF section offers high frequency efficiency and "jitter-free" reception. Dual conversion circuitry free from image and spurious responses. Quadruple-tuned IF networks offer 3 kc selectivity. **Size:** 6" w. x 9" d. x 5" h.
Pierson KE-93 Receiver—With mounting brackets and plugs.
Net Each....... $249.00

Automation Electronics 6/12 V. DC Power Supply—Includes cables and plugs. Wired. Net Each.......... $49.50

Automation Electronics 115/120 V. AC Power Supply—Includes built-in "S" meter, speaker in matching cabinet, cables and plugs. Wired. Net Each...................... $45.00

Automation Electronics 6" x 9" Heavy Duty Hi-Fi Car Speaker—Audio curve matches Model KE-93 receiver. Top performance. Net Each.......................... $10.00

Power packs for other voltages and frequencies supplied on special order.

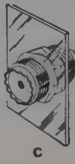
151-30A

elays, Switches, Crystals

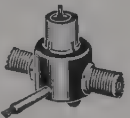
DOW-KEY RELAYS, ANTENNA SWITCHES, CONNECTORS

A

B



C



D

MODEL DKC COAXIAL RELAY (FIG. A)

s a new standard for the industry; AC types guaranteed as et as DC types. Low contact resistance due to magnetic princi- contact pressure 50 grams minimum in transmit, 35 grams nimum in de-energized or receive position. Available with special eiver connector (makes sure RF from transmitter will not reach eiver) and heavy duty external SPDT switch. Breakdown volt- in excess of 1000 volts rms. Minimum insulation resistance 000 megohms. Power consumption 4 watts on AC models, 3 ts DC models. Dust cover held in by removable lock ring. New gnet termination eliminates exposed wiring. Solder terminals eted onto ruggedized terminal board. Heavy duty phosphor nze tongue with 3/16" pure silver contacts. All RF parts are vily silver plated. Adjustable connectors and inspection port litate cleaning of contacts. Body is finished in baked blue-gray nkle **Size:** 4¼" x 2¾" x 1⅛"; mtg. holes 6-32 clearance or 8-32 ping. Adjusted for video switching at no extra cost. **Specify tage when ordering.**

Series	Net Each						
	6, 12 or 24 v.		48 v.	110 v.	115 v.	220 v.	
	DC	AC	DC	DC	AC	DC	AC
C*†	$10.90	$11.30	$10.90	$11.75	$11.30	$11.85	$11.30
C-E*‡	12.05	12.45	12.05	12.90	12.45	13.00	12.45
C-G♯†	12.05	12.45	12.05	12.90	12.45	13.00	12.45
C-EE*§	12.65	13.05	12.65	13.50	13.05	13.60	13.05
C-GE♯‡	13.20	13.60	13.20	14.05	13.60	14.15	13.60
C-GEE♯§	13.80	14.20	13.80	14.65	14.20	14.75	14.20

th standard connectors. †Less external switch. ‡With SPDT ch. ♯With receiver protecting connector. §With DPDT switch.

DEL DKF2 DOUBLE MALE CONNECTOR (FIG. B)

igned for mounting relay directly onto output of transmitter. king and for indoor use; silver plated UHF only.
del DKF2—Double male connector. Net Each....... $1 45

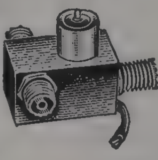
MODEL DKC-P PANEL MOUNTING COAX CONNECTORS (FIG. C)

new DKC-P panel mounting coax connectors can be installed panel in three minutes without any screws; only one ⅝" hole is ired. Two serrated jam nuts hold the connector firmly in tion. New easy soldering terminal.
del DKC-P—Net Each.................................... 70c

MODEL DKC-RFB PREAMPLIFIER (FIG. D)

ed, proven booster is essentially a 50-70 ohm impedance ching broadband preamplifier; not a pre-selector. For medium- to less sensitive receivers, it guarantees an overall gain of 1 to " units in most receivers over 1.5 to 30 mc bands. A slight gain oted through 60 mc. Use for fixed or mobile installations, cially where converters are employed. Powered by receiver or red power source; requires 7 ma, 125-175 v. for B-plus; 6.3 v. amp for heater of 6CB6 tube. **Size:** 1¾" x 2". Weight, 6 oz.
del DKC-RFB—Broadband preamplifier. Each.................................... $10 75

MODEL DKC-TRM ANTENNA SWITCH



enna change-over switch can be used utomobile or fixed station. Model C-TRM 1.5 to 80 mc, Model DKC- 144 to 148 mc, with gains of 2 db to above unity in both models. Heater age (12AZ7 tube), 6.3 or 12.6 volts DC. Two-stage untuned amplifier, ptional gain, low noise level. Instan- ous recovery, transmit to receive and ive to transmit. Excellent receiver tion. Fully TVI proof. Aluminum ing contains components.
del DKC-TRM—Super, 1.5 to 80 mc DC. Net Each.............................$12.50
del DKC-TR2—Super, 144-148 mc, AC/DC. Net Ea. 12.50

DKC-X COAXIAL RELAY KIT (NOT ILLUS.)

e your own assemblies of the DKC relays as listed above, g DKC-X standard body assembly with reed and transmitter antenna input connector installed. Add a DKC-M magnet your voltage needs; and other parts to suit your particular allation.

del DKC-X Relay Body—Factory adjusted for correct contact sure. Net Each.............................$7.45
del DKC-S UHF Connector—Net Each............. 1.15
del DKC-R Receiver Protecting Connector—Net.... 2.30
del DKC-SPDT—External SPDT switch assembly.Net 1.15
del DKC-DPDT—DPDT switch assembly. Net Each. 1.75
del DKF-2—Double Male Connector. Net Each...... 1.45

MAGNETS—DKC-M

AC Voltages up to 220 volts. Net Each.............$2.70
DC Voltages up to 48 volts. Net Each............. 2.30
Volts DC (5,000 ohm coil). Net Each............. 3.15
Volts DC (10,000 ohm coil). Net Each............. 3.25

PETERSEN PRECISION CRYSTALS

TYPE Z-2
PR
QUARTZ CRYSTAL
FREQ-KC
7000
PETERSEN
COUNCIL BLUFFS
IOWA

Low drift, high output, high activity. Moisture and contamination proof. Drift limited to less than 2 cycles per mc per degree. X-ray orientation guarantees uniform cut. Frequency calibrated to ±500 cycles, except 160 Meter, ±250 cycles, and type Z-9A, ±3 kc, for amateur service. All amateur types fit standard octal socket ... with .486" pin spacing. EXACT FREQUENCY (INTEGRAL KILOCYCLE) WITHIN ALL AMATEUR BANDS AVAILABLE. Units UNCONDITIONALLY GUARANTEED by manufacturer. Use P R and **Know** Where You Are!

AMATEUR AND SPECIAL CRYSTALS

Type	For	Frequency Range	Net Ea.
Z-1	Aircraft	3023.5 kc, .005%	$3.45
Z-1	MARS and CAP	1600 to 10,000 kc, .005%	3.45
Z-1	TV Marker Xtals	Channels 2 thru 13	6.45
		4.5 mc Intercarrier, .01%	2.95
		5.0 mc Signal Generator, .01%	2.95
		10.7 mc FM, IF, .01%	2.95
Z-2*	Amateur Service Fundamental	1750 to 2000; 3500 to 4000 kc; 5000 to 6000 kc; 7000 to 7425 kc; 8000 to 8222 kc; 8334 to 9000 kc; (all ±500 cps, except 1750-2000, ±250 cps)	2.95
Z-9A	Amateur Service	24000 to 24666 kc; 25000 to 27000 kc, ±3 kc	4.95
Z-9A	Amateur Service	50000 to 54000 kc ±15 kc	6.95
Z-6A	Frequency St'd	100 kc	6.95
Z-9R	Citizens Band Class "D"	26.965 to 27.225 mc; FCC assigned frequencies, 0.005%. Specify.	2.95
Z-9R	Citizens Band Class "D"	Receiver, 0.005%. Specify IF frequency; also, if IF above or below transmitter frequency.	2.95
Z-9R	Radio Control Class "C"	26.995 to 27.255 mc. Specify frequency, 0.005%.	2.95
Z-9R	VHF Type Aircraft	For LEAR, NARCO and similar equipment in the 121 mc region, requiring crystals in 30 mc range	4.95
2XP	Experimental	For converters, etc.	
		1600 to 12000 kc, ±5 kc	3.45
		12001 to 25000 kc, ±10 kc	4.45

*Available only in bands listed.

COMMERCIAL TYPES

Type	For	Frequency, KC	Net Each		
			.005%*	.01%*	.02%*
Z-1	Fundamental	900-1,600	$ 7.00	$ 6.40	$ 6.00
Z-1	Fundamental	1,601-12,000	6.50	6.00	5.50
Z-1	Harmonic	12,001-20,000	7.00	6.40	6.00
Z-1	Harmonic	20,001-30,000	7.50	7.00	6.50
Z-1A	Fundamental	500-1,600	7.00	6.40	6.00
Z-1A	Fundamental	1,601-2,000	6.50	6.00	5.50
Z-1B	Fundamental	1,000-12,000	6.50	6.00	5.50
Z-1B	Harmonic	12,001-20,000	7.00	6.40	6.00
Z-1B	Harmonic	20,001-30,000	7.50	7.00	6.50
Z-1H	Fundamental	500-1,600	9.00	8.60	8.20
Z-1H	Fundamental	1,601-12,000	8.50	8.20	7.90
Z-1H	Dual Unit	1,601-12,000	14.00	13.50	13.00
Z-1K	Fundamental	500-1,600	9.00	8.60	8.20
Z-1K	Fundamental	1,601-12,000	8.50	8.20	7.90
Z-1M	Fundamental	1,000-10,000	8.50	8.20	7.90
Z-1R	Fundamental	150-900	7.50	7.20	7.00
Z-4	Fundamental	1,601-12,000	6.50	6.00	5.50
Z-4	Harmonic	12,001-20,000	7.00	6.40	6.00
Z-4	Harmonic	20,001-30,000	7.50	7.00	6.50
Z-7	Fundamental	900-1,600	7.00	6.40	6.00
Z-7	Fundamental	1,601-12,000	6.50	6.00	5.50
Z-8	Fundamental	500-1,600	7.50	7.00	6.50
Z-9	Fundamental	175-500	7.50	7.00	6.50
Z-9	Fundamental	1,000-3,000	9.00	8.40	8.00
Z-9	Fundamental	3,001-12,000	6.50	6.00	5.50
Z-9	Fundamental	12,001-15,000	9.00	8.40	8.00
Z-9R	Harmonic	15,001-50,000	9.50	9.00	8.50
Z-9R	Harmonic	50,001-70,000	17.50	17.00	16.50
Z-9T	Fundamental	100-174	8.50	8.00	7.50
E-1	Fundamental	100-1,600	12.50♯	......	......
E-1	Fundamental	1,601-7,000	12.50♯	......	......
Z-21	Fundamental	150-500	17.50	17.00	16.50
Z-22	Fundamental	150-500	9.50	9.20	9.00
Z-22	Fundamental	1,000-3,000	9.00	8.40	8.00
Z-22	Fundamental	3,001-12,000	8.50	8.00	7.50
Z-22	Fundamental	12,001-15,000	9.00	8.40	8.00
Z-22	Harmonic	15,001-50,000	9.50	9.00	8.50

*Tolerances. ♯Exact Frequency.

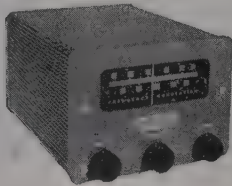
ACCESSORIES

Single Sockets, Z-9, Z-9A, Z-9R. Net Each..............$0.25
Single Sockets, Z-1, Z-2. Net Each.......................... .30
Dual Sockets. Net Each.. .35
Adapters, Z-1 and Z-2 to ¾" socket. Net Each........... .40

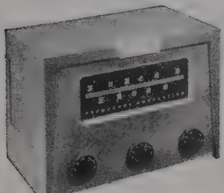
Monitoradio AM and FM Receivers

AM, FM, AND ALERT RECEIVERS

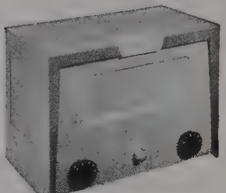
MODELS M-40, M-160



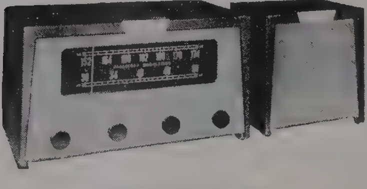
MODELS MR-33, MR-10



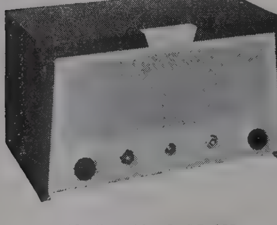
MODELS MRC-33, MRC-10



MODEL DR-200



MODELS MCA-100-L, MCA-100-H



MODELS PR-35, PR-155

MODELS PR-35, PR-155 FM RECEIVERS

This 117-volt, AC/DC operated unit receives all communications in the 152-174 mc band. Quality-built for long life, trouble-free service. Sensitive superhet circuit gives 100 kc selectivity. Drift compensated. 10 microvolt sensitivity. Ratio detector gives quiet operation under "no signal". **Consumption:** 30 watts at 117 volts. Temperature-compensated. 4″ PM speaker. **Tubes:** 1-12AT7, 2-6BJ6, 1-19T8, 1-35C5, 1-35W4. **Size:** 9½″ w. x 6″ d. x 5½″ h. Weight, 5 lbs.

Monitoradio Model PR 155—Tunable FM receiver, 152-174 mc range. AC/DC. With 14 indoor antenna. Net Each.................................... **$49.95**

Monitoradio Model PR-35—Tunable FM receiver, 30-50 mc range. AC/DC power source. Net Each..... **$49.95**

NEW MODELS M-40, M-160 MOBILE FM RECEIVER

High quality FM mobile receivers are tunable across the entir emergency communications bands, 30-50 and 152-174 mc, respec tively. Ideal for monitoring police and fire departments; trucking railroads and other industrial or governmental radio systems Invaluable aids in monitoring two or more channels. **Features** Double conversion circuitry for highest sensitivity, built-in 4″ PM speaker, built-in squelch, tuned RF stage, and illuminated slide rule dial for easy, accurate tuning. **Sensitivity:** 2 µv or less **Squelch:** Adjustable 1 µv. **Power Output:** 0.8 watt. **Powe Required:** 12 v. DC. **Controls:** Tuning; Squelch Adjust and Volume Control. **Tubes:** 10. Attractive cabinets; easy installatio and chassis removal for servicing. Universal mounting supplied **Size:** 4½″ x 6½″ x 8¾″. Shipping Weight, 9 lbs.

Monitoradio Model M-40—Tunable FM mobile receiver for 30-50 mc range. Net Each................ **$99.5**

Monitoradio Model M-160—As above but for 152-174 mc operation. Sensitivity 4 µv or less. Net Each....... **$99.5**

MODELS MR-33, MR-10 FM RECEIVERS

Tunable receivers for 30-50 or 152-174 mc bands (Civil Defens frequencies optional on order). Designed for use by state, county and municipal police; fire departments; transportation companies industrial activities, etc. **Features:** Fully tuned RF stage for bette image rejection; 3-gang condenser; built-in all-electronic squelc adjustable for absolute quieting; built-in 5″ speaker; illuminatec slide rule dial for night operation; provision for external speaker rugged, attractive two-tone metal cabinet. **Sensitivity:** 4 mv o less for 20 db quieting. **Squelch Operation:** MR-10, 2.2 mv; MR-33 2.0 mv. **Tubes:** MR-10—1-6BC5, 1-6U8, 2-6BJ6, 1-6AL5 1-12AX7, 1-6AK6, 1-6X4; MR-33—1-6U8, 3-6BJ6, 1-6AL5 1-12AX7, 1-6AK6, 1-6X4. **Power:** 0.8 watt, 105-125 v. AC, 60 cp (AC only); 10% distortion. **Size:** 11¼″ long, 7⅞″ high, 6½″ deep Weight, 14 lbs. U/L Approved.

Monitoradio Model MR-10—Tunable FM receiver, 152-174 mc; AC operation only. Net Each............ **$64.5**

Monitoradio Model MR-33—Tunable FM receiver, 30-50 mc; AC operation only. Net Each.............. **$64.5**

MODELS MRC-33, MRC-10 FM RECEIVERS

Crystal-controlled single frequency for 25-54 or 147-174 mc bands Designed for use by state, municipal and county police; fire depart ments; civil defense; transportation companies; industry; etc **Features:** Fully tuned RF stage; superior image rejection; trans former-type power supply; built-in 5″ speaker; adjustable built-in squelch; two-tone metal cabinet; provision for external speaker red pilot light for night operation. U/L Approved. **Sensitivity:** mv for 20 db quieting. **Squelch:** MRC-10, 2.5 mv; MRC-33, 2 mv **Power:** 0.8 watt, 105-125 v. AC, 60 cps; 10% distortion. **Tubes:** MRC-10—1-6BC5, 1-6CB6, 1-6U8, 1-6AL5, 2-6BJ6, 1-12AX7 1-6AK6, 1-6X4; MRC-33—3-6BJ6, 2-6CB6, 1-6AL5, 1-12AX7 1-6AK6, 1-6X4. **Size:** 11¼″ long, 7⅞″ high, 6½″ deep. Wt., 14 lbs

Monitoradio Model MRC-10—Single frequency FM receiver, 147-174 mc (specify). Complete with crystal aligned to order. AC operation only. Net Each........................ **$76.5**

Monitoradio Model MRC-33—Single frequency FM receiver, 25-54 mc (specify). Complete with crystal aligned to order. AC operation only. Net Each........................ **$76.5**

MODEL DR-200 FM RECEIVER

Two-band communications receiver. Fixed and tunable combination AC model for 30-50 mc and 152-174 mc. Tunable feature used alternately with the flip of a switch. Performs as any standard crystal controlled monitor receiver under routine conditions **Sensitivity:** (for 20 db quieting) 1 mv low band, 2 mv high band. **Squelch Operates:** .5 mv low, 1 mv high. **Image Rejection:** 65 db low, 30 db high. **IF Rejection:** 60 db low, 100 db high. **Power Output:** 1.5 watts at 10% distortion. **Tubes:** 1-6BJ6 low band amp.; 1-6BK7 cascode RF high band amp.; 2-6U8 osc. mixer, high and low band; 1-6CB6 crystal osc., low band; 1-6BK7 crystal osc. mult high band; 1-6BJ6 IF amp., 10.7 mc; 1-6U8 2nd osc. mixer; 2-6BJ6 IF amp. 455 kc; 1-6BN6 gated beam lmtr. disc.; 1-12AX7 squelch and audio amp.; 1-6AL5 squelch rect.; 1-6AQ5 audio output; 1-5Y3GT rectifier. Brown wrinkle cabinet, gray panel. **Size:** 8″ x 14½″ x 9⅜″ deep. Weight, 17 lbs., 12 oz. U/L Approved.

Monitoradio Model DR-200—
Net Each.................................... **$149.95**

Monitoradio Model DRS-1—Matching speaker, as illustrated.
Net Each....................................**$14.95**

Crystals—ground to order. Net Each................. **11.95**

MODELS MCA-100-H, MCA-100-L
ALERT RECEIVERS

Designed for commercial and civil defense use; certified OCDM Type #R-74 + R-76. Crystal controlled for single channel 25-50 or 147-174 mc. **Freq. Stab. & Temp. Range:** .006% −20° to 60° C. **Spurious and Image Resp.:** At least 60 db down. **Audio Output:** 1 watt, less than 10% distort. **Power:** Uses 117 v. AC, 60 cps. **25-50 mc Model:** 1 µv or less sensitivity; Selectivity, 33 d adjacent channel, 30 kc nosewidth; squelch sens., threshold o .3 µv. **147-174 Model:** 1.5 µv or less sens.; select., 52 db adj. channel, 30 kc nosewidth; squelch sens. threshold of .5 µv. U/L Approved.

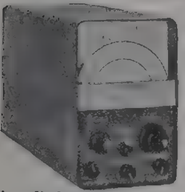
Monitoradio Model MCA-100-L—25-50 mc model. With squelch and crystal. Net Each............... **$124.95**

Monitoradio Model MCA-100-H—147-174 mc model. With squelch and crystal. Net Each............... **$124.95**

Amateur Equipment, Accessories

R. L. DRAKE AMATEUR EQUIPMENT, FILTERS

SIDEBAND RECEIVER

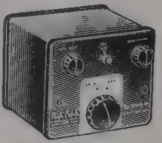


Features for best SSB and CW. Late engineering changes include: Crystal calibrator with front panel control; switch position for WWV for accuracy; AVC tube changed to 6BJ8 for improved TR switch operation. **Features—Stability:** High stability VFO has warm up drift of less than 300 cps after 15 minutes operation. Crystal-controlled, high frequency conversion establishes the same stability for all bands. **Selectivity:** 2.5 kc at 6 db; 8.1 at 60 db. Sideband tuning control adjustable ±3 kc. **AVC:** Amplified-delayed AVC. Integrating dual-action time constant circuit gives fast charge-slow discharge for modulation, but fast charge-fast discharge on short pulses. This provides some noise limiter action. **Detection:** Product detector for SSB, CW and AM by exalted carrier method. **Operating Range:** Seven 600 kc tuning ranges cover five "ham" bands from 80 m. to 10 m., plus WWV-10 mc. **Main Dial:** Scale length 8.3"; 10 kc divisions—600 kc each band-tuned with 4½ turns fast knob or 30 turns of slow knob. **Sensitivity:** Less than 1 µv for 20 db. **Antenna Attenuator:** 30 db. Switch provided to switch pad in or out. **"S" Meter:** Calibrated in "S" units to S9 and 20, 40, 60 db over S9. S9 is approximately 100 µv. "S" units are at approximately 6 db intervals. **AF Response:** 300-3000 cps. **AF Output:** To internal speaker or 4 ohms to external speaker, headphones and transmitter anti-trip. **RF Input Impedance:** Match 50-75 ohm coax line. **Built-in Speaker:** For portable use. **Tubes:** 13. **Power Consumption:** 50 watts at 115 v., 60 cps. **Size:** 6¾" w x 15" d x 11" h. Weight, 18 lbs.

Drake No. 1A Sideband Receiver—Net Each...... $299.00

5" x 7" Oval Speaker—Net Each.................... $15.00

NEW AUTOMATIC HYBRID PHONE PATCH

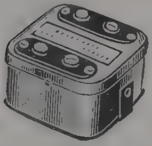


Makes phone patching easy—specifically developed for SSB, but fully automatic with any voice operated transmit-receive set-up. No manual switch required. Similar to a telephone hybrid coil, it transfers the received speech to the phone line and the phone party's speech to the transmitter. Nulls receiver output to more than 20 db below telephone transmitter input. RF filtering prevents feedback from phone line pick-up. Free from hum for undistorted audio quality. **Controls:** Mike-Patch selector; Transmit Input; Receiver Output; and Line Null Adjust. **External Connections:** Crystal mike input connectors; line connections; voice coil connections; and output to transmitter. Comes complete with mike connector, phone plug, .01 ceramic for carbon mike by-pass, and full instructions.

Drake No. 584-A Hybrid Phone Patch—Net Each.... $34.95

Drake No. 584-C—Same, but for Collins transmitters. Net Each.................... $34.95

UNIVERSAL HIGH PASS FILTER

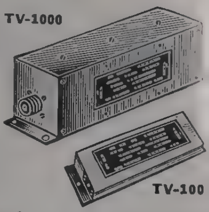


Completely eliminates interference on TV receiver due to amateur transmission on 6-meter to 160 meter band, even when the transmitter is next door. Also provides full protection against regular IF interference. Design attenuates all signals 55 mc and higher, less than 1 db; 52 mc and lower, more than 40 db. Installs easily at the antenna lead-in, at the input to the booster or TV receiver. Optimum impedance 300 ohms. Iron core, bifilar coils for maximum reduction of parallel current interference. Excellent for both UHF and VHF channels.

Drake No. TV-300-HP—Net Each.................... $3.57

Drake No. TV-72-HP—Same as above, but for 72-ohm input. Net Each.................... $3.57

LOW PASS FILTERS



Filters are electrically identical, differing only in power rating and size. Passes 6-160 meters; attenuates transmitter harmonics that fall in channel 2 or higher. Four effective pi sections provide sharp cut-off and high attenuation. Particular attention given to attenuation of harmonics of 8 mc crystals used on 6 meters and to attenuation of the second harmonic of 10 meters. Will not de-tune antenna feed systems with low SWR. Matches 52-ohm coax line with low insertion loss. Easy-to-mount rectangular cases (with solder connections, or use your own SO-239 coax connectors).

Drake No. TV-1000-LP—May be used on transmitters with up to 1000 watts maximum input. 200 watts maximum on 6 meters. Net Each.................... $14.95

Drake No. TV-100-LP—Same as above, only for use on transmitters up to 100 watts maximum input. 20 watts maximum on 6 meters. Mounts with solder connections provided (or use your own SO-239 connectors). Net Each.............. $5.95

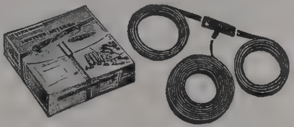
INDUCTUBE® LINE INTERFERENCE FILTER

Unique design to attenuate interference into radio and TV sets through the power line. Use between power source and the radio or TV set to cut interference caused by neon lights, electric shavers, appliances, other radios, power tools, etc. Can be used between the interfering appliance and the power line to prevent interference entering the power system. Unlike common filters of this type, the "Inductube" element is designed so that no lumped capacitance or inductance is utilized, therefore no resonant frequency exists which would limit the effectiveness of the filter even at the highest TV frequencies (VHF and UHF).

Drake No. LN-5 "Inductube"—Net Each.............. $5.82

AMPHENOL HAM ANTENNA KITS

- **FOR BOTH TRANSMITTING AND RECEIVING**
- **WILL TRANSMIT AS MUCH AS 500 WATTS**



Simple, effective antenna system which can be used for both transmitting and receiving. Kit contains two lengths of #16 copper-clad steel conductor twin-lead cut to band length; one 75-foot length of standard 300 ohm twin-lead for lead-in; one high strength laminated "T" block; assembly and installation instructions. Will safely deliver a microvolt of received signal or transmit as much as 500 watts from the final amplifier.

Amphenol No.	Frequency	Band	Antenna Length	Net Each
139-010	28 mc	10 meters	16′ 6″	$ 5.35
139-020	14 mc	20 meters	33′	6.00
139-040	7 mc	40 meters	66′	7.80
139-080	3.5 mc	80 meters	132′	11.25

Note: Model 139-020 may be obtained for the 15 meter band (21.2 mc). Model 139-40 may be obtained for shortwave reception covering the 31 meter (9.6 mc) band and the 25 meter (12.2 mc) band.

JULIUS BLUM POLYSTYRENE MATERIAL

POLYSTYRENE SHEET

J. Blum No.	Thickness	Net Each 12" x 12"	Net Each 12" x 24"
JB-125	1/16"	$ 4.15	....
JB-126	3/32"	4.80	....
JB-127	1/8"	5.50	....
JB-128	3/16"	7.15	....
JB-129	1/4"	8.15	....
JB-245	1/16"	....	$ 7.80
JB-246	3/32"	....	9.15
JB-247	1/8"	....	10.50
JB-248	3/16"	....	13.15
JB-249	1/4"	....	15.65

J. Blum No.	Thickness	Net Each 24" x 24"
JB-301	1/16"	$11.15
JB-302	3/32"	13.00
JB-303	1/8"	14.80
JB-304	3/16"	18.75
JB-305	1/4"	23.00
JB-309	3/8"	31.25
JB-311	1/2"	38.65
JB-315	1/32"	9.65
JB-316	5/16"	27.65
JB-317	5/8"	50.00
JB-318	3/4"	69.25
JB-319	1"	94.15

12 DIAMETER
7/8 DIAMETER
5-16-00—3 16-10

SATIN FINISH TUBING

J. Blum No.	O.D.	I. D.	Net Each 12" Lgth.	Net Each 48" Lgth.
JB-201	1/4"	1/8"	$0.10	$0.40
JB-202	5/16"	3/16"	.14	.56
JB-203	3/8"	1/4"	.18	.72
JB-205	1/2"	3/8"	.26	1.04
JB-206	5/8"	1/2"	.32	1.28
JB-207	3/4"	5/8"	.40	1.60
JB-208	1"	7/8"	.56	2.24
JB-220	1 1/2"	1 1/4"	1.50	6.00
JB-222	2"	1 3/4"	2.20	8.80

454-59A

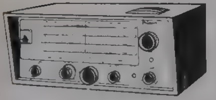
TRANSPARENT POLYSTYRENE ROD

J. Blum No.	Diameter, Inches	Net Each 12" Lgth.	Net Each 48" Lgth.
JB-100	1/8	$0.03	$ 0.12
JB-101	3/16	.07	.28
JB-102	1/4	.12	.48
JB-103	5/16	.18	.72
JB-104	3/8	.26	1.04
JB-105	7/16	.36	1.44
JB-106	1/2	.48	1.92
JB-107	5/8	.72	2.88
JB-108	3/4	1.00	4.00
JB-109	7/8	1.42	5.68
JB-110	1	1.90	7.60
JB-111	1 1/8	2.50	10.00
JB-112	1 1/4	3.00	12.00
JB-113	1 3/8	3.60	14.40
JB-114	1 1/2	4.30	17.20
JB-116	1 3/4	6.00	24.00
JB-118	2	7.50	30.00

WE CARRY A COMPLETE STOCK OF INSULATORS AND INSULATING MATERIALS. DO NOT HESITATE TO ASK FOR ANY ITEM THAT SPACE REQUIREMENTS HAVE NOT PERMITTED US TO LIST IN THIS BOOK.

Philmore Electronic Kits and Sets

COMMUNICATIONS RECEIVER KIT

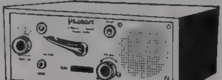


Precision engineered all-wave receiver; has features unmatched by higher priced receivers. **Features:** Highly sensitive, superheterodyne circuit with individual, adjustable coils for each band; full-wave transformer-isolated design for safe, shockproof operation; full electrical bandspread on each band, with 11″ main tuning dial face; built-in BFO and noise limiter. Provision for use with either singlet or doublet antenna. Input jack for external Q multiplier when desired. Auxiliary accessory power jacket. Built-in heavy magnet speaker. Bench or rack-panel mount. **Coverage:** 550 kc to 30 mc in four bands **Controls:** RF Gain Control, incorporating an AVC on-off switch; Function Selector for phone or CW reception, with a stand-by position for use while transmitting; Band Switch; Bandspread calibrated from 0-100; Volume Control with AC switch; Phone Jack; S-Meter. **Signal Indicator:** "S" meter on front panel aids tuning. **Tube Complement:** 1-6X4, 1-6BE6, 1-6AZ8, 1-6AV6, 1-6AQ5.

Philmore Model CR-5AC Kit—Complete with tubes and "S" meter, less cabinet. Net Each............... **$39.95**

Philmore Model CR Cabinet—Heavy gauge steel cabinet finished in light gray wrinkle with dark gray panel. **Size:** 15³⁄₁₆″ w. x 10″ d. x 6⁹⁄₁₆″ h. Net Each................................**$7.95**

CITIZENS' BAND TRANSCEIVER KITS



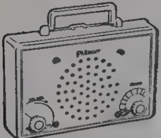
A kit that can be built by anyone, without previous electronic knowledge or skill. By just following self-explanatory pictorial diagrams, clear step-by-step instructions, proper operation conforming to all FCC specifications on any of the 22 authorized channels is assured. Ideal for private communication between homes, automobiles, offices, farms, etc. No test or amateur license is required for the operation of this transceiver. Advanced features include: Any three desired channels may be automatically switch-selected instantaneously on front panel; pre-tuned frequency with an accuracy of 0.005%; automatic quieting on standby reception eliminates annoying squeals and hiss; drift-free detector. Will pick up transmission from furthest limits of transmitter range. Transmitter delivers allowable five watts maximum plate power. Can be adapted for either 110 v. AC or mobile operation without under-dash wiring. Complete with hand-held microphone, cabinet, appropriate power supply and power cord, and finished cabinet.

Philmore Model TC11—For 110 v. AC operation. Less antenna. Net Each.................................. **$39.95**

Philmore Model TC612—For 6 and 12 v. DC operation. Less antenna. Net Each.................................**$44.49**

Philmore Model TC15—Five-section whip antenna with bottom loading coil. Net Each...............................**$4.50**

TR22A PORTABLE TRANSISTOR RADIO KIT

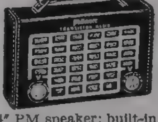


Features: Completely transistorized—no tubes; built-in antenna coil; 4″ Alnico PM speaker. Covers range of 550 to 2500 kc, including standard broadcast, shortwave, police and marine. Modern circuit employs two transistors and a germanium diode, operated by a single 9 volt "A" battery (RCA VS300 or equal). Sturdy, attractive plastic case is only 7½″ x 5″ x 2½″ overall, with retractable handle; weighs only 22 oz. with battery. Furnished complete with all parts, step-by-step instructions and wiring diagrams, wire and solder, but less battery and carrying case.

Philmore Model TR22A—Net Each **$12.94***

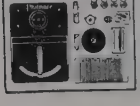
Philmore Model TCC—Leatherette carrying case with adjustable shoulder strap. Net Each................................**$2.04**

TR44 "HIT PARADER" PORTABLE RADIO KIT



Using the latest improvements in advanced transistor circuit design, this portable radio kit is easily assembled by following the step-by-step instructions furnished. Superselective, four-transistor superhet circuit, plus diode; uses transformer-coupled audio driver for powerful tone and clarity. IF transformer and oscillator coil pre-tuned at factory. Covers entire standard broadcast range, 550-1650 kc. Powerful built-in 4″ PM speaker; built-in high "Q" loop antenna. Supplied with phone jack and nipple type earphone for private listening. Economical battery consumption; uses one 9-v. transistor battery (RCA VS300, Ray-O-Vac 1600, Eveready 226, or equivalent). Batteries **not** supplied. Furnished complete with all parts, "Texon" leather cabinet (7⅞″ x 5½″ x 2⅜″) with handle, and full instructions. Weight, 2½ lbs. (with battery).

Philmore Model TR44—Net Each **$24.95***

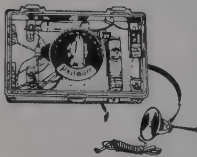


CRYSTAL RADIO RECEIVER KIT

Includes molded bakelite case with contact slider, crystal holder, crystal detector and cover, cat's-whisker support and spring cat's-whisker, ready-wound coil, clips, single phone with headband, and all necessary hardware and instructions.

Philmore Model 7001A—Net Each **$3.15***

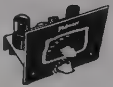
TRANSISTOR BATTERY RADIO KIT



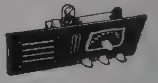
No soldering required. Printed template furnished. Uses transistor and germanium diode. Tunes entire broadcast band. Kit includes transistor, germanium diode, penlite battery, antenna wire, ground wire, 1,000-ohm earphone with headband, and all necessary components required for complete assembly. Transparent plastic cabinet 5⅜″ x 3¾″ x 1¼″.

Philmore Model TR-9—Net Each................ **$6.31***

AC-DC RADIO KITS



7001B



7001C

TWO-TUBE AC-DC RADIO KIT

A two-tube kit (one tube is a rectifier) permits anyone to obtain excellent results by merely following the simple instructions. Use one each 35Z5GT and 12SJ7 (not supplied). Furnished with a punched and formed chassis, gray hammertone panel, silk-screened dial and complete instructions.

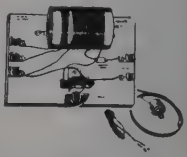
Philmore Model 7001B—Net Each.................... **$8.09***

THREE-TUBE AC-DC RADIO KIT

More elaborate than the two-tube and much greater in signal strength—permitting use of a 4″ PM speaker. Simple instructions with pictorial, schematic diagrams. Silk-screened dials and gray hammertone finish. Superior in tone and selectivity to many manufactured radios. Uses 1-35Z5GT, 1-50L6GT, and 1-12SJ7 tubes. Completely assembled, you have a **TWO-BAND** receiver, covering standard broadcast (550-1700 kc) and short wave (6-18 mc).

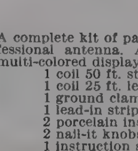
Philmore Model 7001C—Complete with speaker, less tubes. Net Each.................................. **$12.94***

GERMANIUM DIODE RADIO RECEIVER KIT



Features variable capacity tuning, high "Q" coil, permanently fixed crystal. Plywood baseboard, with template label. Easy to assemble. Supplied with single 1000-ohm phone with headband, hardware and instructions.

Philmore No. VC-1000—Germanium diode receiver kit. Net Each................ **$3.25***



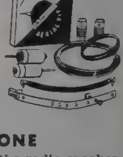
CODE PRACTICE TELEGRAPH SET

Compact, sturdy unit for beginners. Uses Signal Corps type key with adjustments for touch tension and depth. Buzzer is easily adjusted for tone. Entire unit is assembled on plywood base with clasp holders for two 1½ v. flashlight batteries. Set can be used singly or two complete units, connected by 3-wire cable for two-way communication practice. Key can be used to operate any ordinary amateur transmitter. Supplied with instructions and wiring diagrams, less batteries.

Philmore Model 750—Net Each...................... **$3.00**

Philmore Model HF203—Buzzer only. Net Each..........**60c**

AERIAL KIT

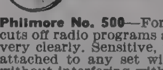


A complete kit of parts for assembly of a professional antenna. Attractively packaged in multi-colored display box. Kit consists of:

1 coil 50 ft. stranded aerial wire.
1 coil 25 ft. lead-in wire.
1 ground clamp.
1 lead-in strip.
2 porcelain insulators.
2 nail-it knobs.
1 instruction sheet.

Philmore Model 2103—Net Each...... **99c**

CARBON HAND MICROPHONE



Talk or sing through the radio speaker. Button switch cuts mike in and out of broadcast. Simple to install. Equipped with 9-ft. cord.

Philmore No. 500H—Carbon hand microphone. Net Each.... **$1.91**

Philmore No. 500—For home broadcasting. Push button switch cuts off radio programs and brings in the home broadcaster's voice very clearly. Sensitive, with excellent volume, shockproof. Easily attached to any set without rewiring and can remain attached without interfering with regular broadcasting. Net Each.**$1.47**

***10% Federal Excise Tax Included.**

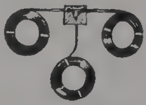
Amateur Gear, Accessories

CONELRAD MONITOR

A complete electronic Conelrad alarm system. Converts any receiver having AVC into a monitor. When broadcast station goes off the air, a loud, clear tone is immediately sounded in the receiver—no buzzers or relays or extras to buy. Monitor switch allows receiver to function normally; keeps receiver completely silent during monitoring without transformer clatter. Modifies easily for mobile use. Installs easily; can be plugged in or out of receiver. Attractive black case with brushed copper panel. Wired, tested and ready to operate.

Ameco No. CD-1 Conelrad Monitor—Net Each....... $14.95

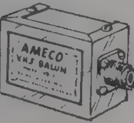
FOLDED DIPOLE ANTENNA KITS



For 10 to 80 meters, using low loss twin lead. Handles up to 300 watts safely High strength, high dielectric connector block assures perfect impedance match and lowest loss; solderless terminals and hardware provided. Twin lead uses copper conductors and pure polyethylene insulation. Each kit complete with twin lead cut to desired frequency and 75′ lead-in wire.

Ameco No. FD-10—10 meters. Net Each............... $3.50
Ameco No. FD-20—20 meters. Net Each............... 3.95
Ameco No. FD-40—40 meters. Net Each............... 4.95
Ameco No. FD-80—80 meters. Net Each............... 6.75

VHF MATCHING BALUN



Provides optimum coupling between 300-ohm twin-lead and 50-75 ohm coax. Covers 50, 144 and 220 mc. Provides a perfect match between the transmission line, converter or receiver input. Uses high efficiency bifilar coils wound on threaded polystyrene forms, as well as an SO-239 coax conductor.

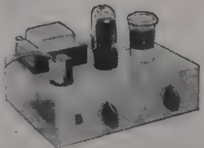
Ameco No. VB-1 VHF Matching Balun—Net Each.............. $3.75

RF CONNECTORS

Low loss RF connectors for amateur stations and laboratory use. Silver plated for high RF conductivity.

Ameco No.	Description	Net Each
PL-259	Plug	$0.73
SO-239	Receptacle	.73
M-359	Right angle adapter	1.66
PL-258	Junction	1.13
M-358	Tee adapter	2.59

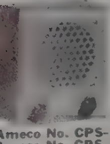
TRANSMITTER KIT



An ideal unit for the beginner or novice who needs a reliable transmitter. A high quality rig with heavy-duty transformer-choke power supply. Pi-section output circuit works into any random length of antenna wire—no antenna tuner required. TVI suppression features for clean, chirp-free keying. Simple to build and operate. **Frequency Range:** 40 and 80 meters CW. **Input:** 15 watts. **Frequency Control:** Crystal. **Finish:** Gray hammertone. white lettering, red knobs. Complete with punched chassis, hardware, instructions and one coil kit for either band.

Ameco No. AC-1 Transmitter Kit—Less tubes and crystal. Net Each........ $16.95
Ameco No. AC-1T Transmitter Kit—With tubes. Net.. $19.08
Ameco No. CK-1—Extra coil for above. Net Each..... .50

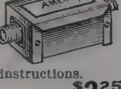
CODE PRACTICE OSCILLATOR, KITS



Available in kit or wired form. Produces a pure, steady tone without clicks or chirps. Will handle a large number of headphones or keys. Converts easily to an excellent CW monitor. Variable tone control and volume control. Built-in 4″ speaker. Operates on 110 volts AC or DC.

Ameco No. CPS-KL—Kit form, less tubes. Net Each $11.95
Ameco No. CPS-WL—Wired, less tubes. Net Each...................... $13.15
Ameco No. CPS-KT—Kit, including tubes. Net Each.. $13.75
Ameco No. CPS-WT—Wired, with tubes. Net Each.... 14.95

LOW PASS FILTER

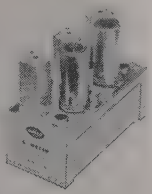


Ameco low pass filter for suppressing the radiation of all spurious signals above 40 mc from the transmitter. Uses a constant K circuit; designed for coaxial cable (52 to 72 ohms). Other features include: Negligible insertion loss; 35 db and more attenuation of harmonic and spurious frequencies above 50 mc; will handle up to 200 watts of RF power; each unit supplied complete with bracket, and instructions.

Ameco No. LN1 with 2 RCA Phono Jacks—Net Each........ $2.25
Ameco No. LN2 De Luxe with 2 SO-239 Coaxial Connectors—t Each.................. $3.75

SIX-METER CONVERTER, POWER SUPPLY

CONVERTER



Compact, highly stable, crystal controlled, 6-meter converter. Special pi-network output coil with taps allows converter to be used with any receiver; frequency is changed by changing the crystal and tap. Uses 6BZ7 (cascode RF amplifier) and 6U8A (mixer-oscillator). IF rejection, over 100 db; noise figure, over 4 db; power gain, 20 db. Operates on 16 ma at 117 volts DC and 0.85 amp at 6.3 volts AC. Comes complete with tubes and crystal for 7-11 or 14-18 mc. **Size:** 2½″ x 2½″ x 5″.

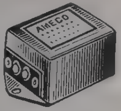
Ameco No. CB-6W Six-Meter Converter—Wired and tested. Specify frequency. Net Each........... $27.50
Ameco No. CB-6K Six-Meter Converter—Kit form. Specify freq. Net Ea.. $19.95

POWER SUPPLY FOR CB-6

Power supply for above converter; delivers 50 ma at 117 volts DC and 2 amps at 6.3 volts AC. No internal connection necessary as plugs are installed in both the power supply and converter.

Ameco No. PS-1W—Wired and tested. Net Each........ $11.50
Ameco No. PS-1K—Kit form. Net Each.............. $10.50

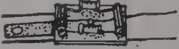
HPX-45 NEW HIGH PASS FILTER



Two-section high pass filter with a cut-off frequency of 45 mc. Provides 80 db and more attenuation at 14 mc and below, 40 db attenuation at 10 meters. Designed for 300-ohm twin line; negligible insertion loss. In an attractive, brown hammertone metal can.

Ameco No. HPX-45 High Pass Filter—Net Each....................... $2.25

HIGH PASS FILTER



This high pass filter is placed in series with the TV receiver's antenna to prevent the transmitter signal from entering the receiver. All frequencies above 45 mc are passed through without loss. Designed for use with the common 300-ohm twin line. Other features include: 40 db and more attenuation at 14 mc and below, 20 db attenuation at 10 meters; negligible insertion loss. Filter uses balanced constant K circuit.

Ameco No. HP-45 High Pass Filter—Net Each.......... 95c

AMECO TECHNICAL BOOKS

No. 5-01 Amateur License Guide—Prepares for Novice, Technician, Conditional and General classes of radio operation. Over 200 questions and answers similar to ones of FCC exams. 32 pages. Price Each 50c

No. 6-01 Mastering the Morse Code—Beginning study for learning International Morse Code. Includes alphabet, how to send, how to receive, hook-up of an oscillator, etc. 32 pages. Price Each 50c

No. 8-01 Commercial Radio Operator s Q & A License Guide, Elements 1 and 2—First of a series, covers FCC exams by questions and detailed, simplified answers. Provides answers for Third Class permit. Price Each.............. 75c

No. 9-01 Commercial Q & A License Guide, Element 3—Second in the series for FCC exams. Includes questions and answers plus a sample FCC exam. With Elements 1 and 2, it provides answers for Second Class permit. Price Each $1.75

No. 10-01 Commercial Q & A License Guide, Element 4—Covers last element required to obtain a First Class Radiotelephone license. Detailed questions and answers with a sample FCC exam. Price Each $1.25

No. 7-01 TV Antenna—Describes the various types of TV antennas and their uses. Provides information for installation and repair Written in the layman's language. 32 pages. Price Each.............. 50c

No. 3-01 Radio-Electronics Made Simple—Simplified explanation of radio theory written for the layman's complete understanding. Covers basic electricity and all phases of radio through transmitters and receivers. 200 pages. Price Each $1.95

CODE AND THEORY COURSES

No. 1—Junior Code Course. Consists of 10 recordings (alphabet through 7½ W. P. M.). Includes typical FCC type code exams. Free instruction book on learning how to send and receive code the simplest, fastest way; plus charts to check your receiving accuracy; plus leatherette bound album.

No. 100-01 Junior Code Course—78 rpm. Net Each..... $6.95
No. 100-45 Junior Code Course —45 rpm. Net Each..... $5.95
No. 100-33 Junior Code Course—33⅓ rpm. Net Each... 4.95

No. 2—Senior Code Course. Includes everything in No. 1 course plus 12 more recordings (alphabet through 18 W. P. M.), plus typical FCC type code exams for General Class and 2nd Class Commercial telegraph licenses.

No. 101-01 Senior Code Course —78 rpm. Net Each... $11.50
No. 101-45 Senior Code Course—45 rpm. Net Each... $10.50
No. 101-33 Senior Code Course—33⅓ rpm. Net Each.. 9.50

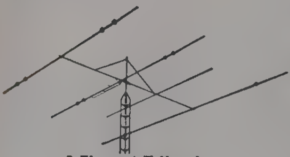
No. 3—Complete Radio Theory Course. A complete, simplified home study theory course in radio covering the novice, technician, conditional and general classes—all under one cover—with over 400 typical FCC type questions to prepare for license examination. No technical background required.

No. 102-01 Radio Amateur Theory Course—Net Each... $3.95

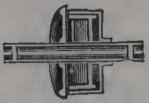
No. 4—Advanced Code Course. Prepares novice operators for the amateur general class and second class commercial license tests. Contains 12 recordings (8 through 18 W. P. M.) plus a complete code book; plus typical FCC code examinations for general and commercial tests.

No. 103-01 Advanced Code Course—78 rpm. Net Each... $5.95
No. 103-45 Advanced Code Course—45 rpm. Net Each... $4.95
No. 103-33 Advanced Code Course—33⅓ rpm. Net Each. 4.95

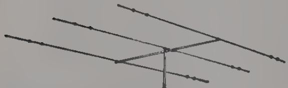
hy-gain Antenna Products



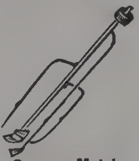
3-Element Tribander



Insu-Trap



3-Element Mini-Tribander



Gamma Match

AMATEUR TRIBAND ANTENNAS

FULL-SIZED TRIBANDERS

The only Tribander in the industry that has both full spacing and full-sized elements. Exclusive triaxial Gamma Match system, with cancelling capacitor built in, delivers perfect 1:1 SWR; factory pre-calibrated, yet adjustable for local variations; assures maximum gain with no compromise to facilitate matching. Insu-Traps used are small, 3″ dia., streamline units with less wind surface than any other trap made; molded in high impact styron; take 1 kw AM and 2 kw PEP; factory resonated for maximum frequency accuracy; weather sealed, waterproofed in polyethylene covers. Hot dip galvanized steel boom, 1½″ dia.; rigid, angular boom brace. Elements are 6061T6 aluminum alloy, 1⅛″, 1″, ⅞″ and ¾″ dia. All hardware galvanized and iridite treated. Longest element, 32 ft.

Hy-Gain 3-Element Tribander—With 18 ft. boom. Gain, 8 db; front-to-back ratio, 25 db. Net Each...... $99.75

Hy-Gain 2-Element Tribander—With 6 ft. boom. Gain 5.8 db; front-to-back ratio, 18 db. Net Each.......... $69.50

MINI-TRIBANDERS

Extra lightweight, compact beam with most of the features of the full-sized Tribanders, above. Reduced size array is carefully tuned for maximum gain and front-to-back ratio. Split insulated dipole feed with coaxial choke results in SWR of less than 1½:1 on all bands with exceptional bandwidth. Single feed line for maximum legal power on 10, 15 and 20 meters. Space-saving design installs anywhere; one-man installation.

Hy-Gain 3-Element Mini-Tribander—With 12 ft. boom; longest element, 28 ft. Turn radius, 13 ft. 10 in. Weight, 39.8 lbs. Net Each.. $69.95

Hy-Gain 2-Element Mini-Tribander—With 6 ft. boom; longest element, 27 ft. Turn radius, 12 ft. 11 in. Weight, 33.8 lbs. Net Each.. $49.95

SELF-SUPPORTING TRAP VERTICALS

14-AV

Multi-band vertical antennas, self-supporting and completely pre-tuned for top performance; no further adjustments necessary. Careful engineering maintains 2:1 SWR or less across the entire band. True, ¼-wave Marconi resonance on each band makes possible low angle DX radiation pattern. Antenna utilizes Hy-Gain Insu-Trap, factory resonated for maximum frequency accuracy; weather-sealed and waterproofed in polyethylene cover. Fiberglas impregnated nylon base assembly supports antenna.

Hy-Gain Model 14-AV—For 10-40 meters. Height, 21 ft. Weight, 13 lbs. Net Each.............................. $27.95

Hy-Gain Model 12-AV—For 10-20 meters. Height, 13½ ft. Weight, 12 lbs. Net Each.............................. $19.95

Hy-Gain Model 6MK De-coupling Stub—Adds 6 meter operation to either of above antennas. Net Each.................................$4.95

Hy-Gain Model LC-80 Loading Coil—Adds 80 meter operation to 14-AV. Net Each......$4.95

Mast Mount Kit for 14AV—Combination mast and radial roof mount. Net Each.........$9.95

Mast Mount Kit for 12-AV—Combination mast and radial roof mount. Net Each.........$8.95

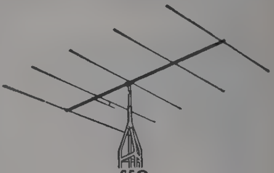
HY-TOWERS

Completely self-supporting tower-type vertical antennal Heavy-duty 33 ft. tower has 17 ft. aluminum tube extension for total height of approximately 50 ft. Unique stub de-coupling system assures low SWR and highly efficient performance on all bands, 10 to 80 meters. Uses no traps. For use with 52-ohm coaxial cable. SWR less than 2:1 on all bands. Weight, 125 lbs.

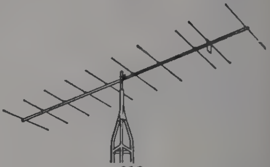
Hy-Gain Hy-Tower Antenna—Net... $129.50

Hy-Tower

VHF BEAM YAGI ANTENNAS



65G



210

Optimum spaced beams designed for maximum forward gain. Parasitic elements constructed of solid 6061T6 aluminum alloy for high-Q. Booms are large, heavy-wall aluminum tubing; hardware is hot dip galvanized and iridite treated for weather resistance. Easy to erect, these beams may be stacked for 3 db additional gain.

Hy-Gain Model 68G—Six meter, 8-element with pre-calibrated Gamma Match for 1:1 SWR. Fwd. gain, 12 db. Boom 18 ft. long. Net Ea. $26.95

Hy-Gain Model 65G—Six meter, 5-element beam. Gain, 9 db. Boom, 9 ft. long. Net Ea. $15.95

Hy-Gain Model 210 Two-Meter—10-element beam with hairpin dipole matching. Gain, 13.4 db. Boom, 12 ft. long. Net Each.. $12.95

Hy-Gain Model 25 Two-Meter—Same but 5-element. Gain, 9 db. Boom, 6 ft. long. Net Each............... $6.95

Hy-Gain Model 111 1¼-Meter—11-element beam with ratio dipole assembly. Gain 14.2 db. Boom, 12 ft. long. Net Each.. $10.95

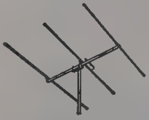
Hy-Gain Model 313 ¾-Meter—13-element beam with ratio dipole assembly. Gain 16.1 db. Boom, 8 ft. long. Net Each.. $9.95

Hy-Gain Model S Stacking Kit—For stacking two ¾, 1¼ or 2-meter beams; specify model of beam when ordering. Net. $4.95

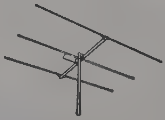
Hy-Gain Model QS Stacking Kit—For stacking four ¾, 1¼, or 2-meter beams; specify beams being used when ordering. Net Each..$15.95

Hy-Gain Model SF Stacking Frame—Steel and aluminum tubing frame with hardware, grip brackets, etc., for use with QS stacking kits. Specify beams being used when ordering. Net Each. $59.50

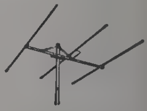
HY-GAIN MONOBANDERS



10-Meter



15-Meter



20-Meter

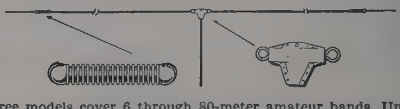
Single band beams factory pre-tuned and pre-matched. Features pre-calibrated Gamma Match assembly with coaxially formed reactance cancelling capacitor built in; makes possible perfect 1:1 SWR. Average gain, 8½ db. Average front-to-back ratio, 24 db. Rugged construction guaranteed 1 year. Easy to assemble.

Hy-Gain 10-Meter Monobander—Small enough for use with TV rotators. Elements adjustable for maximum gain. Boom, 104″ long. Longest element, 17 ft. 10 in. Net Each..... $24.95

Hy-Gain 15-Meter Monobander—Rugged design can be used with heavy-duty TV rotators; adjustable over full 15-meter band. Boom, 142″ long. Longest element, 23 ft. 10 in. With rugged boom/mast clamp. Net Each................. $34.95

Hy-Gain 20-Meter Monobander—Full sized array adjustable over full 20-meter band. Design minimizes sag. Boom, 212″ long. Longest element, 35 ft. 9 in. Net Each...... $59.95

MULTI-BAND DOUBLET KITS



Three models cover 6 through 80-meter amateur bands. Unique stub de-coupling system assures low SWR on all bands; eliminates traps. SWR less than 2:1, all bands. For use with 52-ohm coaxial feed line. Kits include extruded multi-conductor polyethylene cable or doublet wire; 7″ cycolac end insulators; special coaxial type cycolac center insulator.

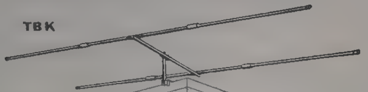
Hy-Gain Model 6BD Doublet Kit—Covers 6, 10, 15, 20, 40 and 80 meters. Overall length, 125 ft. Net Each.... $37.50

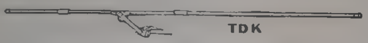
Hy-Gain Model 5BD Doublet Kit—Covers 6, 10, 15, 20 and 40 meters. Overall length, 60 ft. Net Each........ $29.95

Hy-Gain Model 4BD Doublet Kit—Covers 6, 10, 15 and 20 meters. Overall length, 30 ft. Net Each............ $19.95

hy-gain Ham Antenna Products

PORTABLE, MOBILE ANTENNAS


TBK


TDK

TBW

TRAP TRAVELLER MICRO-BEAMS

Hy-Gain Model TBK Micro-Beam Kit—First miniature, 2-element, 3-band beam (10, 15 and 20 meters). Element 16 ft. long, expanded; boom 6 ft. long; collapses to 3 ft. portable package. Requires 4 loading coils. Less coils, Net Each.......... $19.95
With coils, Net Each $79.75

Hy-Gain Model TDK Micro-Dipole Kit—Same, as above, except single element. Mounts anywhere; 52-ohm coax match, low SWR. Element 16 ft. long expanded; collapses to 3 ft. Requires 2 loading coils. Less coils, Net Each $9.95
With coils, Net Each $39.85

Hy-Gain Model UB Mounting Bracket—Universal adjustable for above beam kits and 2 ft. mast. Adjusts 90° vertical to horizontal Net Each $9.75

Hy-Gain Model TCC Carrying Bag—Plastic, with full length zipper; holds either of above beams, coils and mounting bracket. Net Each................. $8.85

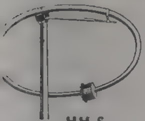
TRAP TRAVELLER MOBILE WHIP

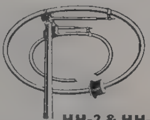
utomatic 3-band operation on telescoping whip. Center loaded, lective circuits give proper inductance on 15 and 20 meters; ading coil shorts out for full ¼-wave 10 meters. Delivers up to)0 watts P.E.P.

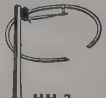
y-Gain Model TBW Base and Whip—Telescopes 3 ft. to 8 ft. in., requires no base spring. High pressure knurled knobs for rfect contact when whip is extended. SWR less than 2:1, all nds. Matches 52-ohm coax. Chrome-plated base ⅝"-½" O.D. th -24 stud for standard mounts. Stainless steel ft whip Less coil, Net Each $15.00

y-Gain Model T-3 Loading Coil—High-Q for 10, 15 and 20 eters No. 14 copper wire air wound on ribbed styron form in eamlined weatherproof plastic cover. For use with any stand- 3 ft. base and 5 ft. whip. Air foil design 1½" w. x " h. Net Each................................... $14.95

MOBILE VHF HALOS


HH-6


HH-2 & HH-6


HH-2

ique development permits combining 2-meter and 6-meter dels, below, for an efficient Duo-Bander Halo. Operates from ngle feed line; low SWR. Instructions provided with orders.

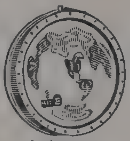
-Gain Model HH-6 Halo—For 6-meter operation. High staity design. Gamma match permits perfect 52 or 72-ohm coax . Resonating capacitor weather-sealed in polyethylene cover. avy 1" dia. tubing and hardware; high impact styron ulators. Net Each.................................. $12.95

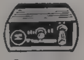
-Gain Model HH-2 Halo—2-meter design gives 15 db more in than whips. Lightweight, 14" dia. design is fully adjustable 2-meter band. Gamma match for perfect 52 or 72-ohm se. Net Each.. .... $5.95

-Gain Model HHS-2 Stacking Kit—Stacks two HH-2 halos extra 3 db gain. Net Each.............................. $3.00

-Gain Model HM Mast—8 ft. telescoping aluminum mast fits ndard mobile mounts. Fits both halos. Net Each..... $4.95

HY-GAIN ROTO-BRAKE


Indicator


Control

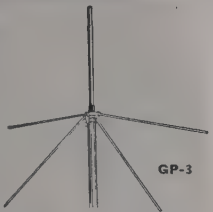
Rotates and holds the largest communication antennas. Braking unit is spring actuated, solenoid released for 5 inch-tons braking power. Limit switches prevent overrun at due North; 370° rotation, continuous. Safety switch energizes motor only after brake is released. Heavy-duty mast coupler takes 1⅝" O.D. masts; adaptable to other sizes. Unit mounts internally in 10" to 18" towers; other mounting adaptations availle. Rotating power, 750 in.-lbs. Indicator is dia. multi-colored world map with counes and call areas outlined and labeled. Mov wedge of light 10° wide at perimeter shows width and direction. Circumference calibrated in 1° units. ecify center map: East coast, West coast or Midwest U.S.; mpass rose for other countries. Control unit for Roto-Brake unts under desk; has On/Off and Rotation Control toggle itches; complete with fuse and 10 ft. cable.

-Gain Model RBX-1 Roto-Brake—Complete sembly. Net Each................................. $179.95

-Gain Model XK-1 Side Mounting Kit—Mounts Roto-Brake small towers Net Each $21.40

Cable—9-conductor. Net, per foot.................. 12c

HEAVY-DUTY GROUND PLANES


GP-3

Single or multi-frequency ground plane antennas cover amateur, commercial and Citizens Band frequencies, 25-500 mc. De-coupling stub, add-on kits available for multi-frequency operation using a single feed line. Factory pre-tuned and precisely adjusted radials. Hardware is hot dip galvanized and iridite treated against weather extremes. Coax termination type SO-239. Power input, 1 kw max. VSWR less than 1.2:1 at resonance. Unity gain.

GP-1

GP-2

Hy-Gain Model GP-1—For 25-50 mc range. Radiator and radials telescoping ⅞" and ¾" heavy wall, heat-treated aluminum alloy tubing. Heavy cycolac base insulator; universal base casting. Fits masts up to 1⅝" O.D.
Net Each.............. $29.95

Hy-Gain Model GP-2—Same, but for 50-88 mc range; polyethylene base insulator.
Net Each.............. $16.95

Hy-Gain Model GP-3—For 108-500 mc range. Ground radials ¼" solid aluminum rod. Radiator ¾" and ⅝" heavy wall aluminum tubing, heat treated.
Net Each.. $12.95

Hy-Gain Model 2AK De-coupling Kit Use with GP-1 or GP-2 for low SWR operation of any additional frequency, 50-88 mc spectrum, using single feed line. Net Each............... $7.50

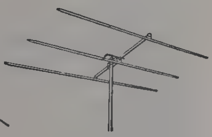
Hy-Gain Model 3AK De-coupling Kit—Use with GP-1, GP-2 or GP-3 for additional frequencies in 108-500 mc range. Net. $4.50

CITIZEN BANDERS

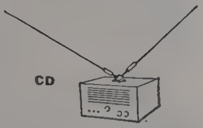
CW

CM

CGP


113-G

CITIZENS' WHIP


CD

Low cost telescoping whip mounts on transceiver or auto door (with door mount, below). Swivel joint for top or rear mounting on equipment. Telescopes from 15" to 45". Base loading coil enclosed in polyethylene cover. Chrome-plated; with PL-259 for coax connection.

Hy-Gain Model CW Citizens Whip—Net Each.... $6.95

Hy-Gain Model ADM Door Mount—With SO-239 receptacle; mounts easily on auto door top. Net Each............... $3.95

CITIZENS' DIPOLE

Highly efficient "rabbit ears" for indoor or portable transceiver use; telescopes from 15" to 45". Unique suction-cup base mounts anywhere, vertically or horizontally. Base loading coils have exclusive "L" matching network for perfect 50-ohm match; enclosed in polyethylene covers. Chrome-plated; with 6 ft. RG58/U coax and PL-259 connector.

Hy-Gain Model CD Citizens Dipole—Net Each....... $12.95

CITIZENS' GROUND PLANE ANTENNAS

Base station antenna kit for high efficiency point-to-point or base-to-mobile use. Telescoping ⅞"-¾" O.D. aluminum radiator; copper clad, steel stranded, radials. Complete with strain insulators, screw hooks, 3 ft. (1½" O.D.) mast and universal (flat or peaked roof) swivel mount. Perfect 50-ohm match; less feed line.

Hy-Gain Model CGP Ground Plane—Net Each.. ... $16.95

Hy-Gain Heavy-Duty Ground Plane—Order Model GP-1, as listed and described in section, above.

CITIZENS' MOBILE

Chrome-plated, stainless steel telescoping whip extends 23" to 73". Highly efficient base loading coil with exclusive "L" matching network for perfect 50-ohm match; polyethylene enclosed. Universal swivel mount for single-hole installation.

Hy-Gain Model CM Mobile Whip—Net Each........ $11.95

CITIZENS' BEAM ANTENNA

Three-element beam provides 8.5 db forward gain; makes 5 watts output equivalent to 35 watts. Ideal for long range, point-to-point use. Commercial construction of lightweight ⅞"-¾" O.D. aluminum elements; 1½" O.D. galvanized steel boom 8 ft. long. Positive grip U-bolt holds masts up to 1⅝" O.D. Factory pre-adjusted and gamma matched for perfect 52 ohms. Longest element 16½ ft. Can be turned by any TV rotator.

Hy-Gain Model 113-G Beam—Net Each............ $29.95

CABLE KITS

Hy-Gain Model CC-12—Coaxial cable kit for use with auto door mount with Model CW; or, with Model CM. Has 12 ft. RG58/U cable with solder lugs and PL-259 connector. Net $2.95

Hy-Gain Model CC-25—For ground planes or beam antenna; 25 ft. RG58/U coax with two PL-259 connectors. Net Each $4.95

Hy-Gain Model CC-50—Same, but 50 ft. long. Net Each 6.95

Mosley Amateur Antennas

NEW "TRAP-MASTER" ANTENNAS

10-15-20 METER BEAMS

Exclusive design for outstanding performance and maximum gain. Easily handles full kw AM output. All-aluminum construction with oversize element sections housing resonant circuits of #10 tinned-copper wound on polystyrene coil forms. Weather and dirt-proof design is stable in all weather conditions; reduces windload; assures long life. Double thickness element minimizes sag. Has rust-proof hardware, plastic insulators and 1½" O.D. boom. Easily rotated using TV rotator.

Mosley Model TA-33 (Fig. A)—Three-element unit has 8 db forward gain; 25 db front-to-back ratio; 1.1/1 SWR. Max. element lgth., 28 ft.; boom lgth., 14 ft.; turn radius, 15.5 ft. Shpg. Wt., 53 lbs. Net Each.................... $\$99^{75}$

Mosley Model TA-32—Two-element version is convertible to 3 elements; has 5.5 db forward gain; 20 db front-to-back ratio; 1.1/1 SWR. Max. element lgth., 28 ft.; boom length, 7 ft.; turn radius 14.5 ft. Shpg. Wt., 32 lbs. Net.. $\$69^{50}$

Mosley Model TA-32-Jr—Junior two-element version handles 300 watts AM. Forward gain 5.5 db; front to back, 20 db. Max. element lgth., 26' 8"; boom, 6' lg.; turn radius, 14' 9". Shipping Weight, 22 lbs. Net Each...... $\$49^{50}$

Mosley Model TA-33-Jr.—Junior three-element version handles 300 watts. Forward gain, 8 db; front-to-back, 25 db or better. SWR less than 1.5/1 at resonant frequencies and is flat across full width of each band. Max. element lgth., 26' 8"; boom, 12'; turn radius, 14' 9". Shpg. Wt., 28 lbs. Net Each.... $\$69^{50}$

MULTIBAND VERTICALS

Top performance in unique, vertically polarized antennas. All-aluminum construction is 100% weather and rust-proof; traps sealed against dirt and corrosion.

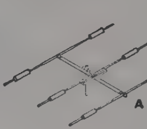
Mosley Model V-5 (Fig. B)—Single antenna operates 10, 15, 20, 40 and 80 meters on single RG/8U feed. Meets USAF electrical and structural specifications. Handles up to 1 kw to the antenna. No external loading coil needed. For best results, radials of 64 ft. length are required, but not supplied. Complete with polyethylene guy, heavy duty base with internal coaxial fitting, hardware and instructions. Length, 43' 8" max. Net Ea... $\$118^{50}$

Mosley Model V-4-8—Two band version for 40 and 80 meters. Husky trap handles 1 kw. Has equivalent to separate ¼ wave-length vertical on each band. Same base mount as Model V-5. Requires 12 radials 64' long for best performance; not supplied. Complete with mount, polyethylene guy, hardware and instructions. Length, 52' 3" max. Net....... $\$85^{00}$

Mosley Model V-4-6 (Fig. C)—Broadband version with automatic bandswitching 10 to 40 meters. Takes full kw with ¼-wave on each band. No tuning required. Two weatherproof traps, base plate and ⅞" x .058" aluminum element sections. Terminal lugs for permanent coax connection; with 50' guy rope. Length, 20' max. Weight, 7 lbs. Net Ea.. $\$27^{95}$

Mosley Model V-3 (Fig. D)—Three-band vertical for 10, 15 and 20 meters. Rated to a full kilowatt. Automatic bandswitching and low angle radiation. Maintains an electrical quarter wavelength over entire bandwidth. Aluminum trap cover, sealed with polyethylene cap, provides positive weather and dirt protection for coils. Ground system requires only short radial. No tuning or adjustment needed. 61ST6 aluminum construction. From base to tip, 11' 6". Complete with base plate, guy line, necessary hardware and instructions. Weight: Net, 4 lbs.; Shipping, 8 lbs. Net Each............... $\$22^{95}$

Mosley Model V-3 Jr. (Fig. E)—Similar to Model V-3, but rated to 300 w., AM. An ideal antenna for hams working low or medium power transmitters. An electrical quarter wavelength covers all three bands, 10, 15 and 20 meters. 61ST6 aluminum construction, weather-proof traps. All the fine features found in "Trap-Master" design have been incorporated. No tuning or adjusting. Requires only short radials. Overall height, 11' 9". Complete with base plate, guy lines, hardware and instructions. Weight: Net, 2 lbs.; Shipping, 6 lbs. Net Each............... $\$17^{95}$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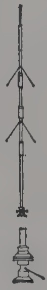
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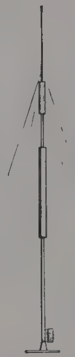
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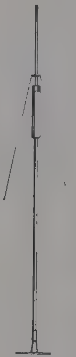
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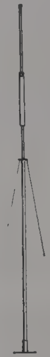
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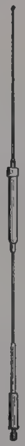
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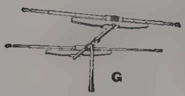
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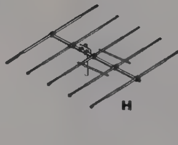
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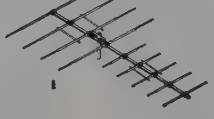
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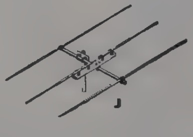

J

10-15-20 METER MOBILE FIG. (F)

Mosley Model MA-3—Amateur mobile version of the famous trap design; operates on 10, 15 and 20 meters. Stainless steel whip section. Internally mounted trap is removable if damaged. Standard base stud, ⅜-24 threaded, fits most mounts. Length, 7' 8". Net..... $\$19^{95}$

"VEST POCKET" 40-METER BEAM (FIG. G)

Mosley Model VPA40-2—Rated to a full kilowatt. Features heavy-duty steel element support plates welded to boom; sturdy redwood element supports and precision wound coils. Forward gain, 5 db; front-to-back, 19 db; SWR, 1.1/1. Max. element lgth., 36'; boom, 15'. Shpg. Wt., 84 lbs. Net Each... $\$74^{95}$

NEW "POWER MASTER" VHF ANTENNAS

Superb performance and rugged construction meets the most rigid VHF amateur requirements. Guaranteed 5 years against loss or damage from weather. Elements are ⅝" and ½" O.D. Metal hardware is 100% rust-proof; 100% corrosion proof using Antenna Coat, supplied. Maintains low VSWR over a broad bandwidth. Clamping blocks are polystyrene and self-aligning. Unique matching stub permits feeding with 52- or 72-ohm coax; or, 104- or 300-ohm twin lead.

Mosley Model A-56 (Fig. H)—Five elements for 6-meters; has 20 db front-to-back. Max. element lgth., 9' 8¾"; boom, 1½" x .058" x 12'; turn radius 8' 5". Weight, 11½ lbs. Net Each $\$41^{95}$

Mosley Model A-142—Two-meter version has 14 elements; 20 db front-to-back. Max. element lgth., 3' 5"; boom, 1¼" x .058" x 12'; turn radius 6' 5". Weight, 11½ lbs. Net Each............ $\$48^{75}$

Mosley Model A-2N6 (Fig. I)—Five-element, 2-meter and 4-element 6-meter combination has 11.5 db and 16.3 db front-to-back, respectively. Element lgths., 3' 5" and 8'; boom 1½" x .125" x 14'; turn radius, 8' 9". Weight, 20 lbs. Net Each................... $\$67^{05}$

"POWER MASTER" SINGLE BAND ANTENNAS (FIG. J)

Full-sized beam designed for a single band; 10, 15 or 20 meter. 100% rust-proof, stainless steel hardware; high impact polystyrene insulators with aluminum elements and boom. Low SWR over entire bandwidth. 8.9 db gain on all bands with an operating capacity well over 1 kilowatt. Fed with 52-ohm coax.

Mosley Model A-310—Three-element 10 meter unit has 28 db front-to-back. Max. element length, 15' 3"; boom size, 12' x 1¼" O.D. x .058"; turn radius, 11' 1". Weight: Net, 25 lbs.; Shipping, 33 lbs. Net Each............. $\$37^{50}$

Mosley Model A-315—Three-element 15 meter unit has 28 db front-to-back. Max. element length, 17' 8"; boom size 12' x 1¼" O.D. x .058"; turn radius, 13' 2". Weight: Net, 26 lbs.; Shipping, 34 lbs. Net Each.................. $\$42^{50}$

Mosley Model A-320—Three-element 20 meter unit has 25 db front-to-back. Max. element length, 35' 4"; boom size 14' x 1½" O.D. x .125"; turn radius, 18' 9". Weight: Net, 34 lbs.; Shipping, 40 lbs. Net Each.................. $\$77^{25}$

ANTENNA ACCESSORIES

Mosley Model TA32-33 Conversion Kit—Provides director element and 7' boom section to make Model TA-32 "Trap-Master" identical to Model TA-33. Conversion is rapid, easy. All materials and instructions provided. Net Each.... $\$30^{25}$

Mosley Model SK-6 Stacking Kit—For use with Model A-56 "Power Master". Provides horizontally or vertically polarized stacking with 3 db additional gain. Net Each......... $\$32^{75}$

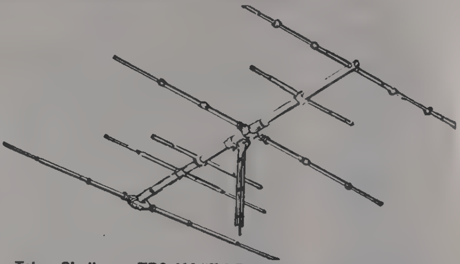
Mosley Model SK-2 Stacking Kit—Same as Model SK-6, but for use with Model A-142 "Power Master". Net Each................... $\$23^{75}$

NEW INNOVATIONS IN ANTENNA DESIGN ARE CONSTANTLY BEING MADE BY MOSLEY. WRITE FOR INFORMATION ON UNLISTED MODELS CURRENTLY AVAILABLE.

telrex Amateur Beam Antennas

MONARCH AND CHALLENGER "TRI-BAND®" ARRAYS

- **THREE-BAND ARRAY—ONE TRANSMISSION LINE**
- **STAINLESS STEEL HARDWARE**
- **STURDY, SEAMLESS ALUMINUM CONSTRUCTION**
- **"CYCOLAC" INSULATORS**
- **HEAVY DUTY GUSSET PLATE**



Designed for the perfectionist, full size arrays provide unidirectional radiation pattern on 3 bands using a single transmission line. Calibrated, tuned and matched for easy on-site assembly without any adjustments required. Out-perform and out-last any so-called tri-bander on the market. Employs a 2″ or 3″ O.D. dural boom, Cycolac heavy-duty element supports, heavy-duty boom coupler, all stainless-steel element clamps and fasteners and heavy-duty steel gusset plate mounting. Elements are taper swaged and assemble through boom with sturdy bolt design and reinforcing sections. "Tri-Band" dipole is "hairpin" impedance matched. Utilizes high efficiency, high voltage, fixed-tuned trap circuitry.

Telrex Monarch Model TBS-626 "Tri-Band®"—Front-to-back ratio 28 db on 10, 15 and 20 meters. Consists of 6 optimum spaced elements (2 "Tri-Band"; one each 10, 15 and 20-meter reflectors; one 10-meter director) on 26 ft. boom for use with 3″ O.D mast. Max. power rating 3 kw, 100% AM. VSWR 1.1:1 at resonant point; bandwidth within 1.5% of 2:1 VSWR. Turn radius, 20 ft. Longest element, 34½ ft. Shpg. Wt., 92 lbs. Net Each **$259.75**

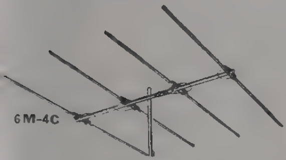
Telrex Challenger TBS-416 "Tri-Band®"—Consists of 4 optimum spaced elements (2 "Tri-Band"; 10-meter reflector; 15 and 20-meter reflector) on 16 ft. boom for 2″ O.D. mast mounting. Gain, 8db or more per band Max power input 1.2 kw, 100% AM. VSWR 1.1:1 with 1.5% bandwidth under 2:1 VSWR. Turn radius, 17 ft. Shpg. Wt., 67 lbs Net Each . . . **$159.50**

Telrex Challenger Model TBS-308 "Tri-Band®"—Three-element version with 8 ft. boom (2″ O.D.). Gain, 5 db. Net Each **$99.75**

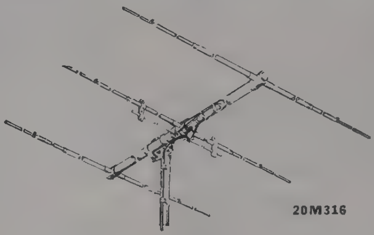
Telrex Challenger Model DTB-30 "Tri-Band®"—Rotatable 10, 15 and 20 meter "Tri-Band" dipole has unity gain, bi-directional pattern. Use with any good TV rotator. Net Each **$38.50**

TELREX COMMERCIAL-GRADE ANTENNA ARRAYS

2M-3C



6M-4C



20M316

Commercial grade arrays for all amateur bands at amateur prices; superior in performance, design and construction to any other antenna. Precision tuned, matched and calibrated to provide highest signal-to-interference and signal-to-noise ratio possible. Equipped with famous Telrex "Balun" match for balanced pattern and minimum TVI and BCI. A heavy duty gusset-plate mounting is supplied for easy attachment to your mast. Rugged, lightweight aluminum construction with stainless steel nuts, bolts and element clamps. Each element is taper swagged, affording a 55% reduction in silhouette and wind drag.

FEATURES

- Extremely rugged elements of advanced sectional design; taper-swaged to reduce useless wind drag and silhouette by 55%.
- Special sturdy molded element support, made of Borg-Warner "Cycolac", a very high-impact thermoplastic resin; holds, insulates and capacity-couples element to the boom for automatic dissipation of precipitation static.
- Stainless-steel airplane-type clamp, holds element sections firmly in exact position.
- Precisely constructed and resonated "Hairpins" reflect the perfection of a Telrex array.
- Heavy-duty gusset-plate mounting enables easy attachment to a 2″ support mast, eliminating the need of drilling masting holes.
- Precision tuning, matching and the famous Telrex "Balun" help produce outstanding performance per element, clean-cut balanced pattern and minimum TVI.
- Single, heavy-wall aluminum boom is small in size, rugged in strength, and light in weight.

TRANSMISSION LINE

These arrays are designed for 52-ohm ransmission line feed such as RG-8/U, RG-14/U or RG-17/U. **Do not use 75 hm transmission line.** Transmission ines other than those of 52-ohm are not ecommended insofar as they will not match the load presented by Telrex arrays and a high VSWR can result. Use of transmission line other than 52-ohm can cause he antenna to appear to resonate as much as 150 kc from the indicated antenna resonant point.

INSTALLATION

Telrex Beam Arrays should be mounted high and clear of all natural or artificial obstructions. As a rule, the higher the better. In no case should the array be mounted less than 40 feet above ground, metal, wire, etc., if top performance is to be obtained. For 10, 15 and 20 meter installations it is recommended that the 10 meter array be placed at the top, 15 meter array 5 feet below, and 20 meter array 5 feet lower, all on a 2-inch O.D. seamless steel heavy duty mast. Such a "Christmas tree" installation is used throughout the world for superior efficiency and minimum trouble of the separately fed 3-band operation on a single supporting mast. On a good tower or telephone-pole installation, an additional gain of 3 db can be obtained by stacking two of the same metered arrays 16 to 18 feet apart.

NEW SPECIFICATIONS AND PRICES

Telrex Number	Meter Band	Elements		Gain db	F/B Ratio db	Boom Lgth.	Beam Width		Shpg. Wt., Lbs.	Net Each
		No.	Spaced				Hor.	Vert.		
420M-1511	¾	15	O	17.2	26	10′ 6″	27°	28°	13	$ 15.00
220M-54	1¼	5	O	12.5	25	3′ 6″	28°	53°	3	5.95
220M-1520	1¼	15	O	17.2	26	19′ 6″	27°	28°	16½	19.00
2M-3C	2	3	O	10.0	18	34″	55°	80°	2¼	5.95
2M-8C	2	8	O	15.5	26	13′ 9″	35°	38°	10	13.75
2M-15C	2	15	O	17.2	26	27′ 9″*	27°	28°	20	39.25
6M-3D	6	3	O	10.0	26	7′ 7″	55°	80°	7	16.25
6M-4C	6	4	O	12.0	28	12′ 0″	58°	62°	10	19.75
6M-624B	6	6	O	15 0	22	23′ 4″*	45°	49°	20	39.95
10M-309	10	3	O	8.4	28	9′	62°	97°	14	39.50
10M-314	10	3	O	10.0	21	14′	56°	76°	30	96.00
11M-2E6	11	2	O	5.0	14	6′ 1½″	65°	95°	13	22.00
11M-309	11	3	O	8.5	26	9′ 1½″	62°	97°	14	41.50
1530-C♯	15	3	Mi	7.0	28	12′	63°	97°	12	46.00
15M-318	15	3	O	10.0	21	18′	56°	76°	48	130.00
20M-DC♯	20	2	Mi	3.5	18	10′	74°	130°	16	57.00
20M-316	20	3	M	8.4	26	16′	56°	85°	40	130.00
20M-318	20	3	M	9.0	30	18′	55°	82°	58	175.00

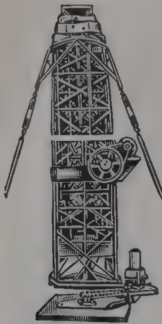
Spacing: O—Optimum; M—Medium; Mi—Super "Mini-Beam". ♯Coil loaded. *Includes boom struts.

TELREX "BEAMED POWER" ARRAYS ARE AVAILABLE FROM ¾-METER TO 40-METER, AT PRICES FROM $5.95 TO $590.00.

Ham Antenna Towers

"HZN" AND "HZRN" TOWERS CRANK-UP EXTRA LARGE DE LUXE

MODEL "HZN"


HZR

All HZN towers are engineered to support the heaviest and largest multiple arrays of 10, 15, and 20 meter "Ham" beams. Self-supporting when installed with Tri-Ex accessory Tripod base mount. The HZ-237N and -354N are also self-supporting when using Models TBC-37N or TBC-54N special base mounts. May be motorized for rotation or lifting and lowering. Meets or exceeds EIA and UBC building standards. Complete with crank and base. Engineering data on request.

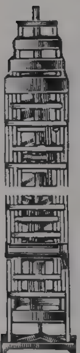
Tri-Ex Model	Ht.	Wt., Lbs.	Net Each
HZ-237N	37′	320	$ 296.91
HZ-354N	54′	590	458.11
HZ-471N	71′	890	687.50
HZ-588N	88′	1225	1049.40
TBC-37N (Base)	....	53	44.95
TBC-54N (Base)	....	55	45.95
Tripod Support	....	100	60.50

MODEL "HZRN"

Redesigned for smooth, frictionless rotating, lowering and raising; meets or exceeds EIA and UBC standards. Deluxe version of HZN, needs no guying; has sealed worm-drive 35:1 raising winch. Can be motorized for full remote control. Complete with rotating base, 2 roller chain sprockets, drive chain, crank and 3 concrete anchor rods and braces. Engineering data on request.

Tri-Ex Model	Height	Weight, Lbs.	Net Each
HZR-237N	37′	510	$559.50
HZR-354N	54′	805	749.50
HZR-471N	71′	1235	987.50

EXTRA LARGE CRANK-UP "H" AND "HS" SERIES


HS

MODEL "H"

Designed and engineered to support large multiple arrays of 10, 15, and 20 meter "Ham" beams, when properly guyed. Model "H" has 11½" and Model "HS" has 13⅞" cross section diameter on top section. Large enough to accommodate most prop pitch and other rotor motors inside top section. Raising winch includes ratchet for easy cranking up during installation. Provision also provided for padlocking winch for safety.

Tri-Ex Model	Height	Weight, Lbs.	Net Each
H-237	37′	150	$152.43
H-354	54′	250	213.41
H-471	71′	365	293.49

MODEL "HS"

Model "HS" has heavy duty large worm gear drive, winch, with 35:1 gear reduction ratio, for maximum ease in raising tower with the largest heavy arrays of "Ham" beams. Full engineering data and calculations are available on request.

Tri-Ex Model	Height	Weight, Lbs.	Net Each
HS-237	37′	200	$208.68
HS-354	54′	305	292.14
HS-471	71′	440	389.53
HS-588	88′	620	546.98
HS-6105	105′	870	745.00

ACCESSORIES FOR H, HS, HZN AND HZRN TOWERS

Model	Description	Net Ea.
BMP-61	Winch raising and lowering kit, less motor	$ 43.95
H-8	Work platform (for all but HZN and HZRN)	28.45
H-8-N	Work platform for HZN and HZRN towers	28.45
H-8HDR	Extra large work platform with safety rail	87.40
TRP-3	Tripod (eliminates guys) for HZ, HZN or SX	60.50
TBC-37N	Hinged base for HZ-237N, for concrete mtg.	44.95
TBC-54N	Same, for HZ-354N	45.95
TBC-37	Same, for SX-237 and 1958 models HZ-237	44.25
TBC-54	Same, for SX-354 and 1958 models HZ-354	45.25
TB-2	Self-aligning flange thrust bearing for mast	17.50
BPR-37N	HZR-237N prop pitch mounting bracket	43.95
BPR-54N	Same, for HZR-254N	44.95
BPR-71N	Same, for HZR-471N	45.95
MC-50	BMP-61 kit with ½ hp motor for manual control	187.50
MC-75	Same, but with ¾ hp motor	220.50
RLRH-50	Remote control, ½ hp, raising, lowering and rotating kit for HZRN towers	701.95
RLRH-75	Same, but with ¾ hp motor for 400 lb. load	734.95
R-50	Tower rotating unit for HZRN towers (specify)	406.95
RLH-50	Remote control ½ hp raising and lowering kit for HZN, HZRN, old HZ or old HZR towers	404.95
RLH-75	Same, but with ¾ hp motor	437.95

TRI-EX 1 X 19 GALVANIZED AIRCRAFT CABLE FOR GUYING

Size	Strength	Net (100 ft.)	Size	Strength	Net (100 ft.)
⅛"	2100 lbs.	$4.62	3/16"	4700 lbs.	$ 7.45
5/32"	3300 lbs.	5.52	¼"	8200 lbs.	12.20

All Tri-Ex Towers Listed Feature New Iron-Phosphate Rust-Proof Undercoating, Epoxy Resin Primer and Baked Enamel Finish Coat.

EMPIRE SEMI-CRANK-UP TOWERS

A fine, safe, durable tower combines strength with amazing ease of installation. Will support masts from 1" to 2¼" diameter. Can mount these towers on ground using hinged concrete base mount, or on roof using "F" or "AF" hinged base mounts. Can be supported with adjustable wall bracket on self-supporting and guyed installations. No gin pole required to erect. Never have to get 10 or 20 feet off the ground.

10 FT. AND 20 FT. SECTION COMBINATIONS

Tri-Ex Model	Ht., Ft.	Description	Wt., Lbs.	Net Each
J3	28	10 ft. top, 20 ft. btm.	85	$ 53.90
J4	36	2-10 ft., 1-20 ft. btm.	120	74.47
J5	46	1-10 ft., 2-20 ft. btm.	150	89.42

TOWERS WITH ALL SECTIONS 10 FT. IN LENGTH

Tri-Ex Model	Ht., Ft.	Description	Wt., Lbs.	Net Each
K-2	18	2-10 ft. sections	60	$ 38.93
K-3	26	3-10 ft. sections	90	59.91
K-4	34	4-10 ft. sections	130	82.51
K-5	42	5-10 ft. sections	175	107.13
K-6	50	6-10 ft. sections	225	137.00
K-7	58	7-10 ft. sections	280	202.25
K-8	66	8-10 ft. sections	335	261.54

TOWERS WITH ALL SECTIONS 20 FT. IN LENGTH

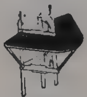
Tri-Ex Model	Ht., Ft.	Description	Wt., Lbs.	Net Each
L-2	38	2-20 ft. sections	110	$ 69.45
L-3	56	3-20 ft. sections	170	105.07
L-4	74	4-20 ft. sections	255	148.61
L-5	92	5-20 ft. sections	345	196.68
L-6	110	6-20 ft. sections	440	268.25
L-7	128	7-20 ft. sections	535	383.13
L-8	146	8-20 ft. sections	650	499.95

BASE MOUNTS AND PLATES

Series D: Hinged, reinforced bar base for mounting in concrete. **Series F:** Adjustable, hinged roof-mounting base for slanted or flat roofs. **Series AF:** Flat steel, hinged base plate for guyed or flat roofs; three ½" anchor bolts for concrete footing use.

For Sections	Series D		Series F		Series AF	
	No.	Net Ea.	No.	Net Ea.	No.	Net Ea.
K-2, L-2, J-3	**D-2**	$11.25	**F-2**	$13.45	**AF-2**	$10.44
K-3, L-3, L-4, J-4, J-5	**D-3**	11.95	**F-3**	13.95	**AF-3**	11.32
K-4, L-4	**D-4**	12.95	**F-4**	14.95	**AF-4**	12.21
K-5, L-5	**D-5**	13.95	**F-5**	15.95	**AF-5**	13.37
K-6, L-6	**D-6**	14.98	**F-6**	16.95	**AF-6**	14.98
K-7, L-7	**D-7**	19.94	**F-7**	23.95	**AF-7**	19.94
K-8, L-8	**D-8**	23.91	**F-8**	31.95	**AF-8**	23.91

TOWER ACCESSORIES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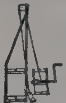
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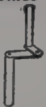
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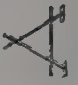

H1

Model	Description	Net Ea.
E-135R	13½ ft. hi-carbon extension	$ 4.06
H-1	Adj. wall bracket for 1-7 sections	8.05
H-2	Adj. wall bracket for 8-10 sections	12.29
H-3	Light duty winch for SX-237 or SX-354	29.90
H-18	Heavy duty winch (9:1 gear) for large towers	67.50
H-7	Offset rotor post	1.74
H-8	Tower platform (all but HZN & HZRN)	28.45
H-10	1½" O.D., 1¼" I.D. bushing	.75
H-11	2¼" O.D. adapter; specify I.D.	3.00

CRANK-UP TELESCOPING TOWERS

Same high quality construction as towers above, but with telescoping sections easily erected by means of built-in winch. Number of sections indicated by first digit, height of tower by last two digits of catalog number.

TOWERS WITH 20-FT. SECTIONS

Tri-Ex Model	Tower Height Extended	Tower Height Collapsed	Weight, Lbs.	Net Each
T-588	88 ft.	21 ft.	280	$204.52
T-471	71 ft.	20′ 8"	210	151.16
T-354	54 ft.	20′ 5"	155	124.48
T-237	37 ft.	20′ 3"	100	82.44
T-120	20 ft.	20 ft.	40	35.44

TOWERS WITH 10-FT. SECTIONS

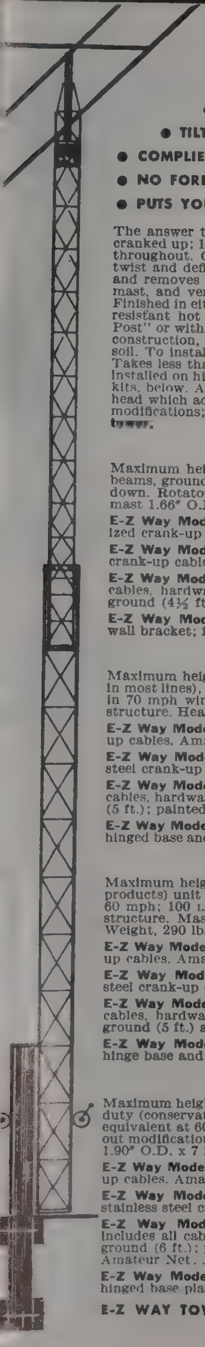
Tri-Ex Model	Tower Height Extended	Tower Height Collapsed	Weight, Lbs.	Net Each
T-761	61 ft.	11′ 9"	280	$265.59
T-652	52 ft.	11′ 4"	215	211.72
T-545	45 ft.	11 ft.	165	141.46
T-436	36 ft.	10′ 9"	125	106.69
T-327	27 ft.	10′ 6"	90	84.86
T-218	18 ft.	10′ 3"	60	58.18

HEAVY-DUTY MODELS—20-FT. SECTIONS

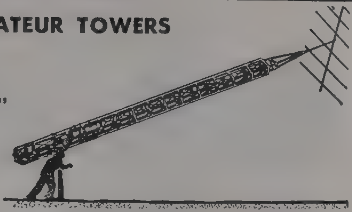
Tri-Ex Model	Tower Height Extended	Tower Height Collapsed	Weight, Lbs.	Net Each
T-7122HD	122 ft.	22′ 4"	515	$518.90
T-6105HD	105 ft.	21′ 10"	460	418.81
T-588HD	88 ft.	21′ 4"	360	326.06
T-471HD	71 ft.	20′ 10"	265	240.09
T-354HD	54 ft.	20′ 6"	210	168.95
T-237HD	37 ft.	20′ 3"	135	124.48

Standard equipment with T towers include base plate and pin, safety stops and crank. Extensions are extra.

-Z Way Tilt-Over Towers

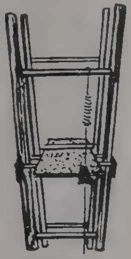


TILT-OVER AMATEUR TOWERS



- NO GUY WIRES!
- CRANKS UP AND DOWN FOR SAFETY
- FEATURES THE "WONDER GROUND POST*"
- TILTS OVER FOR EASY ACCESS TO ARRAY
- COMPLIES WITH EIA (FORMERLY RETMA) TR-116
- NO FOREIGN MATERIALS—ALL DOMESTIC STEEL
- PUTS YOUR BEAM WHERE YOU WANT IT

The answer to a Ham's dream, these fine towers require no guy wires in winds to 70 mph cranked up; 125 mph cranked down. Domestic steel, heavy walled tube and hi-tensile rod used throughout. Continuously diagonal bracing on two faces and horizontal on the third resist twist and deflection under stress. Special safety rest securely locks tower into desired height and removes all strain from crank-up cables. Top bushing prevents horizontal deflection of mast, and vertical thrust bearing eliminates all weight of beam and mast from the rotator. Finished in either dip painted (Goodyear Pliolite S-5 rubber base) aluminum, or high corrosion resistant hot dip zinc galvanize after fabrication. Mount on either the "Wonder Ground Post" or with building-attached kit. "Wonder Ground Post" requires no concrete; its massive construction, with radial fins at bottom and just below the grade line, solidly anchors unit into soil. To install, merely excavate the hole, set ground post in position and tamp refill earth. Takes less than one square foot of lawn area. When ground post not desired, tower may be installed on hinged base plate, bracketed to wall of adjacent structure, using building-attached kits, below. All models except the "Challenger" incorporate special E-Z Way rotary panning head which accepts rotators inside tower structure. CDR HAM-M rotators accepted with no modifications; other rotators require special order. **Specify rotator to be used, when ordering tower.**



Safety Rest

THE "CHALLENGER" 40 FT. TOWER

Maximum height 40 ft.; minimum height 21 ft. Low cost, E-Z Way quality. Accepts light beams, ground planes and quads in 60 mph winds when cranked up; 125 mph winds, cranked down. Rotator mounts above top of tower. Mounting stub and heavy-wall galvanized steel mast 1.66" O.D. supplied. Shipping Weight, 155 lbs.

E-Z Way Model RBD-40P—Tower only, painted finish. Dip painted; with galvanized crank-up cables. Amateur Net........ $90.00

E-Z Way Model RBD-40G—Tower only; hot dip galvanized after fabrication. Stainless steel crank-up cables. Amateur Net........ $125.00

E-Z Way Model GPK-D40—"Wonder Ground Post" mounting kit for above towers includes cables, hardware, tilt winch, and ground post. Post is butamastic coated below ground (4½ ft.); painted above ground (6 ft.). Shpg. Wt., 100 lbs. Amateur Net.. $45.00

E-Z Way Model BAK-D—Building-attached mounting kit with galvanized hinge base and wall bracket; for above towers. Can't streak walls. Shpg. Wt., 8 lbs. Amateur Net... $6.75

THE "MEDALIST FORTY" 41 FT. TOWER

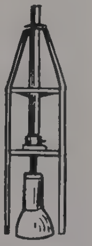
Maximum height, 41 ft.; minimum height 24 ft. Standard duty (compares with heavy-duty in most lines), moderate cost, E-Z Way quality. Accepts tri-band beams or equivalent at 41 ft. in 70 mph winds; at 125 mph, cranked down. Accepts CDR HAM-M mounted inside head structure. Heavy-walled galvanized steel 1.90" O.D. x 7 ft. mast included. Shpg. Wt., 235 lbs.

E-Z Way Model RBS-40P—Tower only; dip-painted finish and galvanized crank-up cables. Amateur Net........ $155.00

E-Z Way Model RBS-40G—Tower only; hot dip galvanized after fabrication. With stainless steel crank-up cables. Amateur Net........ $195.00

E-Z Way Model GPK-S40—"Wonder Ground Post" mounting kit for above towers; includes cables, hardware, tilt winch and ground post. Post Butamastic coated below ground (5 ft.); painted above ground (6 ft.). Shipping Weight, 150 lbs. Amateur Net..... $70.00

E-Z Way Model BAK-S40—Building-attached mounting kit for above towers; with galvanized hinged base and wall bracket. Can't rust-streak walls. Shpg. Wt., 8 lbs. Amateur Net $10.50



Thrust Bearing and Top Bushing

THE "MEDALIST FIFTY" 51 FT. TOWER

Maximum height 51 ft.; minimum 34 ft. Standard duty (equals heavy-duty for competitive products) unit is moderately priced. Accepts tri-band beams or equivalent at 51 ft. in winds to 60 mph; 100 mph, cranked down. Accepts CDR HAM-M without modification inside head structure. Mast supplied in heavy-wall galvanized steel 1.90" O.D. x 7 ft. long. Shipping Weight, 290 lbs.

E-Z Way Model RBS-50P—Tower only; dip painted finish with galvanized crank-up cables. Amateur Net........ $205.00

E-Z Way Model RBS-50G—Tower only; hot dipped galvanized after fabrication; stainless steel crank-up cables. Amateur Net........ $260.00

E-Z Way Model GPK-S50—"Wonder Ground Post" mounting kit for above towers includes cables, hardware, tilt-winch and post. Ground post is Butamastic coated below ground (5 ft.) and painted above ground (10 ft.). Shpg. Wt., 195 lbs. Amateur Net. $87.50

E-Z Way Model BAK-S—Building-attached mounting kit for above towers has galvanized hinge base and wall bracket. Won't streak walls. Shpg. Wt., 11 lbs. Amateur Net.. $10.50

THE "SATELLITE SIXTY" 60 FT. TOWER

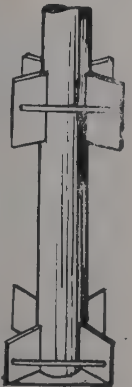
Maximum height, 60 ft.; minimum height, 25 ft. Puts your beam where you want it. Standard duty (conservatively rated), superb construction for towering height. Takes tri-band beams or equivalent at 60 ft. in winds of 70 mph; 140 mph cranked down. Accepts CDR HAM-M without modifications inside head structure. (Other rotators require special order.) Mast supplied is 1.90" O.D. x 7 ft. heavy-walled galvanized steel. Shipping Weight, 430 lbs.

E-Z Way Model RBX60-3P—Tower only; dip paint finish with galvanized crank-up cables. Amateur Net........ $295.00

E-Z Way Model RBX60-3G—Tower only; hot dip zinc galvanized after fabrication; with stainless steel crank-up cables. Amateur Net........ $375.00

E-Z Way Model GPK-X60-3—"Wonder Ground Post" mounting kit for above towers includes all cables, hardware, tilt winch and post. Ground post is Butamastic coated below ground (6 ft.); painted above ground (8 ft.). Shipping Weight, 195 lbs. Amateur Net........ $110.00

E-Z Way Model BAK-X—Building-attached mounting kit for above towers has galvanized hinged base plate and wall bracket. Won't streak walls. Shpg. Wt., 14 lbs. Net.... $17.00



"Wonder Ground Post*"

E-Z WAY TOWERS ARE AVAILABLE ON SPECIAL ORDER IN GREATER STRENGTH AND AT GREATER HEIGHTS.

460X-59B

*Patent applied for.

Amateur Antennas, Accessories

MARK MOBILE ANTENNAS, MOUNT

AMATEUR HELIWHIPS

Molded fiberglas, continuously loaded whips for amateur bands. Replace conventional whips and coils as well as base and center loaded radiators. Mounts on trunk, cowl, fender or hood; efficient on all bands. Continuously wound, step-tapered helical conductor for uniform current distribution; 50-ohm match at resonant frequency. Chrome plated brass ⅜-24 threaded mounting ferrule.

Model	Length	Reson. Freq.	Bandwidth*	Net Ea.
HW-10	4 ft.	29.0 mc	1000 kc	**$ 9.95**
HW-15	4 ft.	21.2 mc	500 kc	**9.95**
HW-20	6 ft.	14.2 mc	250 kc	**10.95**
HW-40	6 ft.	7.25 mc	100 kc	**10.95**
HW-80	6 ft.	3.8 mc	60 kc	**10.95**
HW-11	4 ft.	27 mc Citizens 11-Meter		**9.95**
HW-3	6 ft.	3-band for 10, 15 and 20 M.		**19.50**
HW-6	3 ft.	6 Meters		**9.95**

*For 2:1 VSWR.

SPECIAL MOBILE HELIWHIPS

Extra long models for improved performance. Available cut to any frequency 3 mc through 15 mc at 6 ft. length. Net Each **$18.00**

Model	Meters	Length	Shpg. Wt.	Net Each
HW-815	15	8 ft.	3 lbs.	**$18.00**
HW-820	20	8 ft.	3 lbs.	**18.00**
HW-840	40	8 ft.	3 lbs.	**18.00**
HW-880	80	8 ft.	3 lbs.	**18.00**
HW-420	20	4 ft.	1 lb.	**15.00**

BASE INSULATOR MOUNT

Model HWM-1—Single hole molded insulator mount for Heliwhips. For flat surfaces; uses coax connector (not supplied). Net Each **$7.50**

HELIWHIP DIPOLE ANTENNAS

FOR FIXED STATION OPERATION

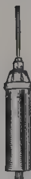
Molded fiberglas dipoles. Helical wound end loading sections fo uniform current distribution on shortened dipole, 50-ohm matc at resonant frequency. Very low reflected power on coaxial cable such as RG-8/U and RG-58/U. Typical installations include usin a mast or pole to give erected height of 20 to 30 feet; may b mounted on a pole projected outward from building or window Either horizontal or vertical polarization; no consideration o ground radials required. In restricted installations, such as indoor or in an attic mounting, less coupling and detuning effects ar noticed than with linear or ground plane type radiators. May b mounted to a small rotator. Tested with full 1-kilowatt input o commercial transmitters, such as KWS-1, etc. Citizens Band unit rated at 100 watts and handles easily the 5-watts legal power fo these units.

Model	L.	Reson. Freq., mc	Band-width*	Shpg. Wt.	Net Each
HWD-10	8′	29	1000 kc	5 lbs.	**$22.5**
HWD-15	12′	21.250	500 kc	8 lbs.	**24.0**
HWD-20	12′	14.150	300 kc	8 lbs.	**27.0**
HWD-40	16′	7.050	100 kc§	10 lbs.	**29.9**
HWD-3	12′	10, 15 and 20 m.		10 lbs.	**54.0**
HW-11259	4′	27 Citizens Band†		. . . .	**9.9**
HWD-11259	8′	27 Citizens Band‡		. . . .	**19.9**

*For 2:1 VSWR. †Includes PL-259 connectors. ‡Two units, eac with PL-259 connectors. 83-1T fittings not supplied (must orde pair). §Adjustable aluminum tuning sleeves allow for adjustmen to any operating frequency and once adjusted the full bandwidt will be obtained.

Any of the HWD Heliwhip dipole units listed above may be cu to a specified frequency.

KRECO ANTENNAS



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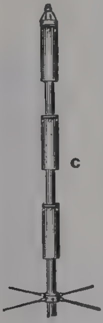

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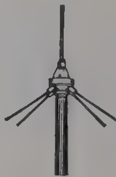

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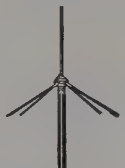

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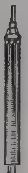

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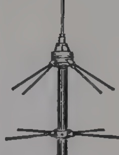

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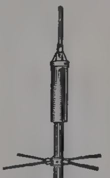


G

MODEL CO-2 COAXIAL ANTENNA (FIG. A)

A vertical coaxial radiator, machined entirely of brass, matching 52 ohm coax cables. The antenna is threaded to fit on standard ¾″ pipe. The feedline is enclosed inside the pipe mast (not supplied). This antenna provides good low angle radiation which gives the most effective coverage for any given transmitter power output. Radio frequency power radiated at high angles is subject to vagaries of reflection from the ionosphere and hence is less effective for short range (5 to 50 miles) communication. **$14.95**

Model CO-2—For the 2 Meter Amateur Band. Net Each

Model CO-150—Cut to your freq., 108 to 470 mc. Net . **$19.95**

MODEL CO-6 COAXIAL ANTENNA (FIG. B)

Vertical coaxial radiator, machined of brass with aluminum top element. Matches 52 ohm coax cables. Feedline enclosed inside pipe (not supplied). **$24.95**

Model CO-6—For 6 Meter Amateur Band. Net Each . .

Model CO-10—For 10 Meter Band. Net Each **$34.95**

Model CO-30—Cut to your freq., 30 to 50 mc. Net Ea. **39.95**

MODEL SC-2 STACKED COAXIAL ANTENNA (FIG. C)

A vertical 4 element co-linear array machined entirely of brass. Tests show gain of up to 6 db over coaxial antenna alone. Matches 52 ohm cables. Feedline enclosed inside pipe mast (not supplied). Very low angle radiation. **$44.50**

Model SC-2—For the 2 Meter Amateur Band. Net Ea.

Model SC-150—Cut to your freq., 108 to 470 mc. Net. . **$49.50**

MODEL GP-2 GROUND PLANE ANTENNA (FIG. D)

Machined entirely of brass. Matches 52 ohm coax cables. Threaded to fit standard ¾″ pipe. Coax feedline enclosed inside pipe mast (not supplied). Ground plane radials reduce the possibility of pipe support mast acting as long vertical radiator producing high angle radiations which distort the normal pattern of the antenna proper. **$14.95**

Model GP-2—For 2 Meter Amateur Band. Net Each . .

Model GP-150—Cut to your freq., 108 to 470 mc. Net . **$19.95**

MODEL GP-10 GROUND PLANE ANTENNA (FIG. E)

Machined brass. Aluminum elements. Matches 52 ohm coax.

Model GP-10—For the 10 Meter Amateur Band. Net Each **$44.95**

Model GP-6—For the 6 Meter Amateur Band. Net Ea. . **$39.95**

Model GP-30—Cut to your freq., 30 to 54 mc. Net Each **49.95**

DUO GROUND PLANE ANTENNA (FIG. F)

Same construction as the ground plane models but with extra element which gives 3 db gain. **$22.45**

Model DGP-2—For 2 Meter Amateur Band. Net Each . .

Model DGP-150—Cut to any freq., 108-470 mc. Net Ea. **$27.45**

CO-PLANE ANTENNA (FIG. G)

A vertical two element array, machined entirely of brass. Fits ¾″ pipe. Matches 52 ohm coax. Provides 3 db gain over coaxia antenna alone. **$22.45**

Model CP-2—For the 2 Meter Band. Net Each . . . .

Model CP-150—Cut to your freq., 108 to 470 mc. Net. . **$27.45**

CUSH CRAFT ANTENNAS

TRI BAND VERTICAL GROUND PLANE

Trapped antenna with low angle of radiation for 10, 15, and 20 meters. Designed for full kw input with 52-ohm feed line directly connected. No tuning or matching networks required; traps eliminate tuning or switching. **S/W/R Across Band Under Normal Conditions:** 20 meters, not over 1.1-1; 15 meters, not over 1.5-1; 10 meters, not over 1.6-1. **Traps:** Rigid air-wound, self-supporting coils of ³⁄₁₆″ aluminum rod. **Condenser:** Rexolite insulated aluminum tubing. **Radiator:** Heavy gauge, 13′ 8½″, telescoping, 61ST6 drawn aluminum tubing. Aluminum hardware. **Radials:** Six heavy 8′ 4″, 11′ and 16′ 7″ stranded aluminum wire with strain insulator at end of each; also act as guy wires. **Support:** Heavy wall pipe with locking set screw; pipe or pole up to 1⅜″ dia. Assembled and ready for installation, less feed line. Shipping Weight, 9½ lbs. **$28.50**

Cush Craft Model ATGP-3—Antenna. Net . .

SINGLE BAND GROUND PLANE ANTENNAS

Single band antennas designed for full kw input with directly connected feed line. Adjustable to any desired spot of its frequency range. Complete and ready for installation, less feed line.

Cush Craft Model AGP-6—6 Meter Antenna. Net Each. **$10.50**

Cush Craft Model AGP-10—10 Meter Antenna. Net Ea. **13.50**

Cush Craft Model AGP-15—15 Meter Antenna. Net Ea. **14.75**

Cush Craft Model AGP-20—20 Meter Antenna. Net Ea. **16.50**

"MOBILIER" 2-METER FIXED-MOBILE HALOS

Horizontally polarized for fixed or mobile use in 144-148 mc range; adjustable for full band coverage. Near-perfect omnidirectional pattern with 5 to 15 db gain as compared to vertical whips working fixed stations with arrays. Uses concentric gamma match for 52 or 72 ohm cable. All-aluminum construction is complete with 9 ft. telescoping three-section mast with special stud for mobile mounts. Stacked version gives 2.8 db gain. Horizontal elements only 14″ in diameter. **$4.95**

Cush Craft Model AM-2—Without mast. Net Each . . . . .

Cush Craft Model AM-2M—With mast. Net Each **$8.70**

Cush Craft Model AM-22—Stacked version with mast, Q sections and hardware. Net Each **$14.95**

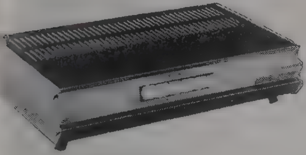
"BLITZ BUG" LIGHTNING ARRESTER

Designed to eliminate heavy static charge build up to protect valuable radio equipment; fits standard coaxial cable. Power handling capacity 1 kw fully modulated. Protects cable from punctures from high SWR; will not affect SWR or performance to 500 mc. It will not create insertion loss. **$3.95**

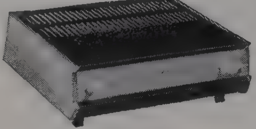
Cush Craft "Blitz Bug"—Net Each . . . .

-ome and Office Intercoms

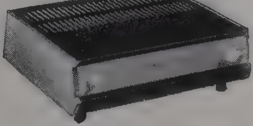
TALK-A-PHONE SIX-STATION SELECTIVE WIRELESS SYSTEM



T-LCM-8806



T-LCS-801, 2, 3



T-LCS-804, 5, 6

MASTER STATION

're is an outstanding development in the Intercommunications d—a Wireless Six-Station Selective System! Incorporating the ·lusive Noise-Free "Sonic-Gate" circuit, this new system offers tant two-way intercommunication to as many as six separate ations. **No Wiring:** Installs without cables merely by plugging o nearest electrical outlet. **Fully Flexible:** Each Master Station iipped with six-channel selector; permits three 2-way conver- ions simultaneously if six Master Stations are in use. A system ·y consist of as few as 2 Master Stations and added onto as more needed. All units in system must operate from same electric vice transformer. **Conferences:** By calling all Master Stations 1 having them tune to the same channel, conferences may be d. **"Uni-Trans" Feature:** Provides 1-way transmission where ired; for dictating, or monitoring. **Paging:** Any Master can page ff stations that are on the same channel. **Cabinets:** Both Mas- s and Staffs are custom designed to combine the look and feel of grained leather with the strength and rigidity of steel. Beau- il finish is charcoal gray with brushed chrome side panels. sists abuse even from corrosive industrial liquids and atmos- res. **Power Required:** Operate universally, 110-120 v. AC/DC. L Approved.

del T-LCM-8806 Six-Station Master—Furnished complete with es and instructions. Ready to use. Size: 14″ w. x 8¾″ x 3⅛″ h. List Price, **$136.00.** Net Each........... **$79.50**

WIRELESS STAFF STATIONS

These Wireless Staff Stations are designed to make the Six-Station System completely flexible. By using two Staff Stations tuned to the same channel, a regular wireless intercom installation is obtained. And naturally, more than two Stations on the same channel can be used. Hundreds of uses can be found for such a system. A Master can be added at any time, expanding the system to include its obvious advantages. Wireless Staff Stations can receive and reply on a single channel only. This channel must be specified when ordering as indicated below. They can be called by and reply to any Master in the system. Like the Master Stations, they require no wiring. Place them where they are desired, plug into an electrical outlet and they are ready for operation. Staff Stations match Master in cabinetry; charcoal gray with brushed chrome side panels. Furnished complete with tubes and instructions. Universally operate on 110-120 v. AC/DC. U/L Approved. **Size:** 10½″ w. x 8¾″ d. x 3⅛″ h.

T-A-P Model	Description	List Price	Net Each
T-LCS-801	Staff Station for Channel 1 only	$77.00	**$45.00**
T-LCS-802	Staff Station for Channel 2 only	77.00	**45.00**
T-LCS-803	Staff Station for Channel 3 only	77.00	**45.00**
T-LCS-804	Staff Station for Channel 4 only	77.00	**45.00**
T-LCS-805	Staff Station for Channel 5 only	77.00	**45.00**
T-LCS-806	Staff Station for Channel 6 only	77.00	**45.00**

MASCO SOUND EQUIPMENT

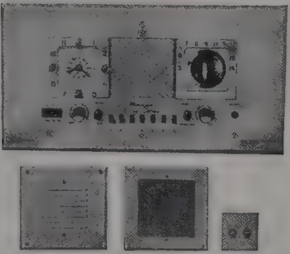
-Z TALK" TWO-STATION INTERCOM SYSTEM

For use in home, small office, restaurant, salon, farm, or nursery. Ideal system for use where a maximum of three stations will provide adequate coverage. Extra remote may be added. STER: Volume control with on-off switch; separate "Talk- en" switch; Master controls both sides of conversation; can n-in on the Remote at will. REMOTE: User can answer calls r the Remote from a distance. No switch to operate—Remote lways "alive" when Master's power is on. **Power:** Output, mw; Consumption, 18 w., 117 v., AC/DC. **Speaker:** 3½ lco V pm, 4 ohm voice coil. **Tube:** 1-12AT7; selenium rectifier. **ish:** Sapphire blue baked enamel. **Size:** 8¼″ w. x 4½″ d. ¼″ h. Shipping Weight, 6 lbs. U/L approved.

sco Model E-Z Talk—Complete with 50′ cable. Pair.. **$13.80**

sco Model REL Remote Station—Net Each......... **$5.27**

WIFE-SAVER EIGHT-STATION MASTER



king and calling note stations that call and talk to er Remote stas and Master. Hinusic distribution selected areas ughout the home. lt-in clock and omatic timer. y's cry in the ry can be heard ntly in any or all r stations. Can loor by merelicking switch: verse with caller hout opening r. **Power Output:** w., 117 v., 50/60 AC/DC. **Con- ls:** Automatic k: Power On-Off and Volume; Talk-Listen; Radio-Intercom; tion Selector; Speaker Volume; Radio Tuning. **Tubes:** BE6, 1-12BA6, 1-12AX7, 1-50C5, 1-35W4, 1-IN-34. **Size:** w. x 8¾″ h. Shipping Weight, 13½ lbs.

sco Model RIC-7G—Eight-Station Master—Com- e with mounting box. Gold finish front panel. Net. **$75.75**

sco Model M-5 Remote Station—With Talk-Listen switch, me control and wall mounting box. Net Each...... **$11.25**

sco Model K-8 Room Remote Station—Ceiling type. Each.. **$11.55**

Model DAS Electric Door Latch Release—Net.. **14.03**

MIDGETALK TWO-STATION SYSTEM

Consists of a Master and Remote station in mahogany finish. MASTER: Has its own volume control with "on-off" switch and separate "Talk-Listen" switch and "on-off" pilot light. REMOTE: May be used for private or non-private operation; has its own "Talk-Listen" switch that allows it to originate call to Master (or upon installation may be wired for non-private operation). The system can also be used as a two-way paging system. **Power:** Output, 2.5 w.; Consumption, 30 w., 117 v., 60 cps. AC/DC. **Speakers:** 3½″ Alnico V Magnet. **Tubes:** 1-12AU6, 1-50C5, 1-selenium rectifier. **Size:** 5″ w. x 4½″ d. x 5⅜″ h. Shipping Weight, 8 lbs. U/L approved.

Masco Model Midgetalk—Complete with 50′ cable. Net Pair.. **$34.50**

Masco Model MRL Remote Station—Net Each..... **$11.34**

"SMALL TALK" TWO-STATION INTERCOM SYSTEM

A sensitive, powerful Master and Remote station system (another Remote may be added) suitable for use in the small factory, stockroom, restaurant and in the home. Volume control with on-off switch; separate "Talk-Listen" switch; natural voice reproduction. REMOTE: "Talk-Listen" switch allows Remote to originate calls to Master; can answer calls from a distance without operating a switch; Remote can be left "open" for baby-sitting or dictation, called "Non-Private" or "closed" for privacy but still able to receive calls from the Master "called Private". **Power:** Output, 1½ w.; Consumption, 30 w., 117 v., AC/DC. **Speakers:** 3½″ Alnico V 4-ohm voice coil. **Tubes:** 1-12AX7, 1-50C5, 1-35W4. **Finish:** Dawn gray baked enamel. **Size:** 8¼″ w. x 4½″ d. x 3¾″ h. Shipping Weight, 6 lbs. U/L approved.

Masco Model Small Talk—Complete with 50′ cable. Net Pair.. **$18.75**

Masco Model RSW Remote Station—Net Each........ **$7.93**

WE CAN SUPPLY ALL YOUR INTERCOM ACCESSORY REQUIREMENTS. CONSULT THE INDEX FOR RELATED ITEMS. WRITE FOR INFORMATION ON NEW OR UNLISTED ITEMS.

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